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PLACENTA PREVIA.

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This is one of the most serious complications ever found in the pregnant and parturient woman. It renders parturition preternatural. It is one of the unavoidable complications of some cases of pregnancy and labor. It very often compromises the life of the mother, and not unfrequently that of the child. Often both succumb to the rapidly fatal hemorrhage, when the flood-gates of the vessels are open. On this point Dr. E. W. King, of New Albany, Ind., has gathered reports of *two hundred and forty* cases occurring in the practice of physicians in this State. Of that number there was a loss of *fifty-four* mothers, or twenty-two and one-half per cent. The mortality among the children was one hundred and thirty-five, or over fifty-seven per cent. (Trans. Ind. State Med. Soc.) This is no small mortality. Yet this is perhaps a fair indication of the average losses of mothers and children in this greatly dreaded and unavoidable complication of gestation and labor.

The partial or central implantation of the placenta over the internal os uteri is almost necessarily a cause of hemorrhage. A case of placenta previa without hemorrhage would be distinctively anomalous. The vascular connection of the placenta to the internal surface of the uterus is very intimate, and when this relation is abruptly broken up there is hemorrhage, unavoidably.

The jeopardy of mother and child in these cases is due to loss of blood, and is in proportion—ceteris paribus—to the extent of such loss at any one given time during gestation or delivery. And to the frequency of severe hemorrhages during the latter months of pregnancy.

The immediate cause of the hemorrhage is the rupture of the utero-placental vessels, and the severity of the loss is usually proportionate to the extent of such rupture. Simpson claimed that the greatest loss of blood in these cases would be found to occur where the placental attachment was about equal to the extent of detachment, and that entire detachment of the placenta from the internal uterine surface was one of the best means to be used for checking the flooding. We have very seriously doubted the utility of such practice, but would not set ourselves up against so great an authority.

The rupture that initiates the hemorrhage is brought about by dilatation of the internal os. As such dilation does not usually begin prior to about the close of the sixth month, it follows of course that as a rule we do not commonly meet with loss of blood in these cases prior to that period of gestation. I am sure, however, that I met with one case where the previal attachment gave rise to severe loss of blood during the fifth month; so severe was the loss as to threaten the life of the mother, and to greatly reduce her on several occasions. The fœtus was thrown off about the close of the fifth month, when no further trouble occurred beyond the debility that resulted from such severe losses of the vital fluid.

There may be placenta prævia and yet no hemorrhage until labor sets in; but there is generally one or more distinct hemorrhages more or less severe from the seventh to the close of the ninth month that distinctly marks the character of the

case. Such hemorrhages come from an inability of the uterus to accommodate the placenta and its increasing size, and the vessels to the progressive expansion of the internal cervix. When, however, nature is able to make such adjustment of the uterine and placental surfaces as to amply accommodate the vascular connections, no rupture will take place until the insensible uterine contractions occur, that precede regular labor, and sometimes not until active uterine contractions set in. When the first stage of delivery open out its batteries, rupture of the vessels at the rapidly expanding os occurs, and hemorrhage sets in at once, and in proportion to the extent of such rupture of vascular connection between placenta and uterus.

Bedford made the statement in his work on obstetrics that where hemorrhage does not occur until parturition sets in, the loss of blood is greater and more likely to prove fatal than where there have been several preceding losses. This does not tally with the little experience I have had with these cases. But as every case of placenta prævia is a law unto itself, and so every man's experience with them, it does not at all follow that my experience can be a rule by which to be governed in practice, as indicating correctness of results in general, by which to guide others.

The case that in my hands came the nearest to proving fatal, was one where there had been several severe losses of blood during the last weeks of gestation, but this was badly handled in its first hours of labor. A few premonitory hemorrhages quite invariably appear before the pregnant term closes. This constitutes the most prominent diagnostic evidence of the presence of this condition. Yet there is room for mistake. A clot may be mistaken for a placenta. Care will cause an avoidance of such an error. Specific or malignant vegetations may cause a hemorrhage calculated to lead to the diagnosis of placenta prævia, so also may the rupture of a varicose vaginal or labial vein, or a varicose condition of the cervical veins. Hemorrhage from the pudic veins has been mistaken by very able practitioners for placenta prævia and for post-partum flooding. These cases can only be cleared up by careful taxis, or by carefully tracing the bleeding to its proper source. Hemorrhage may also arise from a partial separation of the placenta when its attachment is not prævial. Such a case can hardly be correctly diagnosed prior to the dilatation of the os or during the first stage of parturition. Again, a partial placenta prævia may be overlooked after the os has begun to dilate well, because of its slender attachment being broken up, and the edge of the placenta drawn off to one side. When the digit enters the os it only comes in contact with the membranes or presenting portion of the child; yet the loss of blood goes on.

If now the finger traces the inner margin of the os, it will be discovered that all the hemorrhage proceeds from the rupture of vessels of a partial or lateral placenta prævia.

The prognosis is grave at the time of labor, in proportion to the approximation of central placental inplantation, and, in proportion to the time the case is taken in charge by the accoucheur, and of his ability to manage the case.

Of the cases in this State, Indiana, tabulated by Dr. King, of New Albany, 22½ % of the mothers were lost. Of 332 cases collected by Swartz, there was one death in 3.86. Simpson states a mortality of one in 3.6. Trask (Prize Essay), one in 3.95.

The results in individual cases depend on the factors entering into them separately, One case may endure fearful loss of blood, and yet recover, as in case 2 of this report. The cool and skillful management of the attendant is always a favorable power for good in such cases. If the physician shows alarm or too great anxiety in any case, it constitutes an unfavorable factor for the patient. Turning or instrumental delivery have each a depressing and fatal tendency; the former is more grave than the latter. It is an unhappy fact that a larger proportion of cases of placenta prævia give mal-presentations than where the placenta is otherwise normally attached, and hence turning is often a necessary procedure, and often causes a fatal issue.

How shall we manage a case of placenta prævia? Certainly, this is a practical inquiry. As every case "is a law unto itself," it is not possible to lay down definite regulations for individual cases. "Few cases, of whatever kind, to which we may be called, are likely to demand a clearer diagnosis of the exact condition and stage of gestation or labor than these, and none demand a more prompt action, a clearer, cooler judgment, and a more ready discernment of the immediate needs of each case as met with at the bedside." Such being the facts, it stands the attendant to have all the accidents, conditions and complications, that ever accompany these cases, well in his mind, in order that he may, with rapid deliberation, meet whatever arises in each individual case, as soon as it falls into his hands. It is never safe to leave the management of these cases to whatever we may happen to conclude to

do on the spur of the exigency. The danger is more than half conquered when we know how to meet it. There should be a thorough comprehension of all the principles and elements that can in any wise enter into any of these cases. Then, and then only, may we meet them with that cool, deliberate, yet quick discernment, that will enable us to do the right thing at the right time and place, and in the right way. Nothing less than this will answer.

The management of cases of placenta prævia are so well set forth in our standard text-books, that I will not state any methods for this part of the work.

When called to a case of placenta prævia, at the time labor is going on, we must be governed by what conditions we find present at that time and in that case. If the labor is in the early stage, the os but little dilated, or not dilated at all, nor but little dilatable, if the hemorrhage is at all considerable and much increased at each uterine contraction, the tampon is in order. This is especially so, if the os is too rigid to admit of rapid dilatation and quick delivery, for under such conditions the patient grows rapidly weaker from loss of blood, and the os only rendered dilatable when sheer exhaustion is brought about by the hemorrhage. If, therefore, we find the os rigid or not easily dilated, and the body of the uterus disposed to contract with a fair degree of vigor, then rupture the membranes, so as to let the water escape and let the head down, to act as a wedge against the mouths of the bleeding vessels; then pack the vagina *very tight* with a tampon, and leave it there until the head is fairly down in the pelvis and pushes the tampon before it. By this time the head will act as a tampon to check the hemorrhage. If it is found on vaginal examination, that the head is not the presenting part, greater care must be used as to leaving the tampon too long to permit such manipulations as the position of the fetus may demand in order to effect rapid delivery. But if the feet or buttocks present, the same rule for the use of the tampon may be relied upon as when the head presents.

The tampon is one of the most valuable means in our possession for the arrest of dangerous hemorrhage in such cases as I have above described. But if the case is in condition for rapid delivery, because of the dilated or easily dilatable condition of the os, then no time should be lost by the use of this means. If the os is rigid, and the uterus shows a readiness to contract upon its contents, there can be no danger in the proper use of the tampon, for any considerable amount of concealed hemorrhage cannot take place. If it is sufficiently tightly packed into the vagina, no blood can escape by the side of it to take exit externally. Indeed the outer portion of the tampon will not be stained at all. By this means the great loss of blood, and consequent exhaustion will be prevented, and the hazard to the mother and child will be vastly curtailed.

Again, the tampon thus wedged in, will act as an irritant to the os, and thus cause more frequent and more energetic uterine contractions. By this means more rapid delivery will take place.

When, however, we come to a case and find the os soft or dilated, and the uterine walls flaccid, the tampon is not to be thought of. Under such conditions, the tampon could only check the flow of blood externally, while it would be accumulating behind it, distending the flaccid uterus, and fearfully if not fatally compromising the life of both mother and child.

But when the os is rigid or but little dilated or dilatable, and the uterus contracting with a fair degree of vigor, it will be impossible for any considerable degree of concealed hemorrhage to occur. The uterus is already distended to its utmost width its own contents or nearly so, and hence no great flow of blood can be hid in its cavity under such conditions. Besides the tampon gathers the blood at and around the mouths of the bleeding vessels, where it forms a clot sufficient to impede or entirely check all further flow until it is removed. Two things cannot occupy the same space at the same time. When the uterus is full, and the vagina is packed to its utmost, there is little room for blood to gather in any great quantity within them.

A tampon loosely, or imperfectly applied, is worse than useless. It is a broken stick, on which if we lean it will give way and pierce the hand. It annoys and irritates without in the least restraining the fatal loss of vital fluid. It is only a blind behind which the flooding goes on, and death seizes its victim.

We have tried several methods of applying this means of relief. A very good plan is to take small bits of soft muslin and pack them in bit by bit, until the vaginal canal will not receive any more, making it very tight. This form of tampon is very annoying to remove, because of the necessity of such frequent returns to the vagina for the pieces composing it. A better way is to take long narrow strips of soft muslin and pack tightly. This is easily removed. Common cotton wool answers a very fine purpose. Also tow, when

well cleaned and soft. When a speculum is at hand, it should be used, as by that means the vulva is protected. But a speculum and long forceps are rarely at hand in these cases, at the moment most needed. If the tampon material is well soaked in cold water it will be advantageous in that it will have a little tendency to check the flow, and the water will fill the meshes so that it will take up less blood; besides it can be packed tighter when wet that when dry.

I have, by some of these methods, tamponed the vagina so tight, that not a drop of blood could escape to the outside, and the tampon would not be soiled for half its depths. A tampon of any of these kinds of material will, of course, absorb some blood, but if it is wet when introduced and packed *very tight*, it cannot absorb much, and will hold the blood until forms a firm clot about the os and open vessels.

I wish, yet again, however, to enter my earnest protest against the use of the tampon indiscriminately in these cases. When we find the os dilated or soft and the uterine fibre flaccid, give this means the clear go by, as it is a dangerous remedy. But under the opposite conditions it is clearly a valuable means to control hemorrhage. The india-rubber bag makes a fine tampon, but it is not likely to be at at hand, nor are we, in the face of a flushing hemorrhage, permitted a delay long enough to send for such nice conveniences. Cases of this kind demand prompt, energetic and skillful management, and when the flood-gates of life are open wide, there is no time to wait for some pet means or plan of treatment. Such means as are at hand must be used promptly, or life is gone before we get our fancy agents into bearing on the case.

If we are called to a case where there is a sufficiently open os to admit of forceps, or of turning, one or the other should be done at once, according to the conditions present and parts presenting. When the head presents fairly, it is well to use forceps. If some other portion presents, it is better to turn at once. Often in these cases if exhaustion is not alarmingly great it will be well to rupture the membranes, and by a broad binder around the body and fundus drawn down as tightly as the patient will permit, the ends being held by assistants and drawn quite firmly, thus pushing the head against the bleeding surfaces and checking the flow. But where there is a central implantation this will not do, and nothing short of rapid delivery will avail, and little side remedies must not be allowed to cause us to fritter away precious time.

The local or general use of astringents in these cases, as has been highly recommended by some, is sheer folly, and irrational. They are worse than useless, for reasons too apparent to quote here.

When to remove the tampon, if resorted to, is a practical question. It is not to be withdrawn until the contractions have become urgent and frequent, and the presenting part of the child is beginning to push it out of the vulva, or press it hard against the perineum. It should then be removed as it advances. However, when assured that the presenting portion of the fœtus has well engaged in the pelvis, so as to press on the open mouths of the bleeding vessels all the time, the plug may be all taken away. At such a time, pressure over the fundus, as much as can readily be endured, will keep the fœtus down against the placenta, and so hold measurably in check the flow. Such pressure will also greatly increase the frequency and force of the contractions and expedite delivery.

A very good practice in almost all of these cases, as in nearly all others of great debility or prostration, where there is lack of vigorous uterine contractions, is to administer five to ten grains of quinine or of cinchonidia. It not only holds up the strength of the patient, but seems to exert a marked influence over the force of the uterine contractions, rendering them much more energetic and powerful. At no time should we brook long delay before delivery, where any considerable hemorrhage is going on, or exhaustion is imminent, the membranes ought to be ruptured at once and at the very onset of the case for reasons already given, and then if imminent danger is present from loss of blood, in spite of the best correct means to stop it, we must at once apply the forceps or turn, according to the position of the child and condition of the mother and of the immediate parts involved.

Ergot is a poor remedy to lean upon in placenta prævia. Its action is too slow, and even if it should act promptly on the uterine fibre, its depressing power over the circulation is detrimental and should be avoided. Quinine is a far better and safer remedy. A stimulant dose of morphia or of laudanum or of whiskey often answers an admirable purpose. Atropia, hypodermically, may be used, but is far less safe than either of the above named agents. These will often stimulate the flagging heart and nerve centers, and by this means the nerve centers are better supplied with blood, respiration is better maintained, and by these means a new fibre is added to strengthen the fragile thread of life.

I will now report briefly from my notes three cases out of four it has fallen to my lot to see, this being an exceptionally large number for one physician to see in an ordinary obstetric practice. Some men of extensive experience never see a single case in a long career of practice.

Mrs. G., æt. 33. Sixth pregnancy at the close of the eighth month of gestation; had not noticed anything unusual, but now was suddenly seized with profuse hemorrhage, without any previous admonition. I saw her in a half hour from the first appearance of flooding. She was lying on the bed, pale as death, gasping for breath, restless, very anxious for her own safety, pulse scarcely perceptible. There were no sensible contractions of the uterus. I found a large clot in the vagina, which I removed, and found the os closed and the cervix obliterated. The finger was withdrawn and all clots of blood removed from the vagina and from about the person, that could be, without disturbing her position and quietude. Clean napkins were then one after another placed against the vulva, and changed very often at first, but at longer intervals later. By this method of careful watching and the gentle use of the taxis occasionally, it was soon found that there was no further hemorrhage beyond a mere stain. During the condition of deep depression caused by the great loss of blood and the fright, the head was kept low, perfect rest maintained, and she was revived by the use of cold drinks, often repeated in small quantities. These she took with avidity, as do all persons who have endured great shock from hemorrhage. After waiting at her bedside for two hours, careful examinations showed no further hemorrhage for the present, and no indications of uterine contractions, and also, the patient was commencing to rally finely. She was ordered to keep very quiet, to use an unstimulating diet, to use the bed-pan instead of rising for her evacuations. I saw her frequently during that and the next day, and visited her for several days. She observed my orders strictly. After two days she began to regain the natural color of her face and mucous surfaces, and begun to implore me to let her get up. This desire was readily controlled by reminding her that to get up was only to repeat the danger of renewed floodings. She was instructed to let me know at once in case hemorrhage should set in, or if she should notice any pain at all indicating the commencement of labor. She did not call on me for four weeks. I was then hastily summoned with word that she was in labor and was flooding. On reaching her bedside, which I did in a few minutes. I found her pale, feeble, alarmed, pulse very feeble, respiration labored. As usual her lady attendants were greatly excited and alarmed. The taxis revealed an open os, large enough to admit the tip of the finger, tolerably rigid, the placenta plainly to be felt, latterly attached, the body of it, being to the right, and about two inches of it, was found to extend to the left. The head of the fœtus was felt with difficulty, but made out to be the part presenting. The uterine contractions not strong, recurred every five or six minutes. As the os was quite rigid and but little dilated, I ruptured the membranes, tamponed the vaginal canal very tightly with small pieces of soft muslin, after which there was not a drop of blood escaped externally until the tampon was removed. The patient's head was kept low, a firm broad bandage was passed over the fundus and body of the uterus, and the ends were brought out under and around the back and entrusted to two assistants, one on either side of the bed, with instructions to keep it drawn as tight as the patient's comfort would permit. She was given cold drinks ad libitum, and quinine and whiskey quite liberally. After free emesis she began to rally soon, the treatment being continued. In two hours the pulse began to return with moderate force, and there was some return of color to face and lips, though not much; but the face lost its wild anxious expression, and being assured that her condition was fairly hopeful, she became quite cheerful. The uterine contractions were now becoming quite forcible, and it soon became apparent that the tampon was being crowded down to and through the vulva. It was therefore removed as it was forced down. The head was found to be now forming a complete and an effectual tampon, especially as it was held well against the bleeding vessels by the steady pressure of the broad bandage in the hands of the assistants. She was soon delivered of a healthy eight-pound male child, living, though for a time blanched and feeble. She had a good getting up, and in three weeks resumed her domestic duties, which were by no means light.

The loss of blood in this case was very considerable in both instances, so as to saturate the bed, and run the pulse down until quite imperceptible, also to produce a pallor, akin to the appearance of death.

Had I attempted prompt forced delivery at the second hemorrhage, when I found the os open but rigid, it seems to me quite probable that the necessary additional loss of blood that such a procedure must have caused, would have ended the

life that was then quite ebbed away. The tampon not only checked the flow, but gave time for the patient to gather strength, and also for the uterus to gather increased power of contractions, and thus to bring the labor to a close, thus closely approximating the normal labor. The result at least justified the practice.

Case 2. Mrs. H. æt 36, mother of six children. Had several hemorrhages during the eighth and ninth months of gestation, which ceased after being quite profuse. She still attended to the wants of her family. At the close of her term, she was aroused by uterine pain and profuse hemorrhage about 3 a. m. A midwife was sent for, who thought she could manage the case. The hemorrhage continued more or less freely until the woman had fainted several times, and was thought by the lady assistants to be dying. I was sent for in haste, and saw her at 1 p. m., which was ten hours after the initiatiory pains of labor, and hemorrhage had set in. I found her pulseless at the wrist, extremities cold, and she appearing for more dead than alive. I lowered her head, gave stimulants hypodermically as quick as possible. Then by the tax is found a centrally implanted placenta and a presenting head. I pushed my left hand past the placenta, brought down the feet, and delivered quickly, easily and almost without the mother's recognition of it. The placenta soon followed, and the uterus contracted promptly. The woman was now left with her head very low, and kept very quiet. Stimulants and quinine were given per rectum, by the mouth, also whiskey hypodermically, free dry heat was applied to body and extremities. For four hours there was no pulse at the wrist, a very feeble heart impulse, and a gasping respiration. Soon after this there was slight reaction. Atropia seemed to improve the respiration and force of the heart, given hypodermically in a small dose. For twenty-four hours from this time, or twenty-eight hours after delivery, there was slow but steady reaction. Her final getting up was slow. For three weeks she could not raise up without great danger of fainting, and it was five weeks before she could be up safely, and for many weeks she was feeble and anæmic, troubled with abscess of the heart, and many evidences of having been thoroughly broken down. She finally made a good recovery, but it required great care and the liberal use of iron, bitter tonics, ale, stimulants, etc.

Would the tampon have been of use here in this case? Decidedly no! Not at the time I was called into the case. To have used it would have been to initiate a funeral. But, early in the case, it perhaps would have done as well as in the first reported case. To say that I gave that midwife a left-handed blessing, would be putting it very mildly. Yet I hoped the lecture and advice might redound to the good of some of her future dupes, who might be silly enough to depend upon her in the hours of distress and of danger. I have no objections to educated female physicians; I object to quacks everywhere, and all the time.

Case 3. Mrs. G. English, æt. 34, mother of four children, called me when her gestation was in the eighth month, because she was passing considerable blood at times. She could not tell whence it came, but always found it in the vessel after urinating. At first, I suspected placenta prævia. The taxis revealed nothing positively, only there was no stain of blood in the vagina at that time. At my next call there was considerable blood in the vessel, which she had just passed only as I came into the house. The taxis revealed no stain of blood in the vagina. A small wad of cotton was stuffed into the vagina and left there. At my next visit the loss of blood at time of micturition was still going on. I removed the cotton wad, but it was not stained. Also a napkin in use was not stained. The blood, therefore, must come from the bladder. This proved to be true, for she would every now and then void sanguineous urine for months after her confinement.

At the close of her term of gestation, I was hastily called, with word that Mrs. G. was in labor and flooding, I soon reached her, found her and her attendants greatly alarmed. Taxis indeed now revealed placenta prævia. The os was dilated to an inch in diameter, and the blood poured out like a mill-tail at every uterine contraction. While the os was but little dilated, it was very dilatable, and the uterine fibre by no means rigid. In these points it was very unlike the conditions found early in the first case. Should I tampon here? No. To do so would endanger the life of the woman by concealed hemorrhage. I at once ruptured the membranes, found the head presenting all right, used vigorous external pressure, gave promptly a large dose of cinchonidia. In a short time the external pressure, aided by the feeble uterine contractions, brought the head down so that by its steady pressure on the open vessels, the hemorrhage ceased, and labor became natural and fairly rapid, the child being delivered in about one hour. No further trouble was experienced in the case. The child was feeble and blanched, but did

very well after the first day. The mother made a good and rapid recovery.

These three cases, with the histories of multiplied scores of others, teach us that every case "is a law unto itself," and that we must needs comprehend accurately the principles involved in their management, and then meet boldly and clearly the conditions of each case just as we find it.

The bloody urine in the last case above given was well calculated to deceive. It is almost unique to have such a symptom and no accompanying evidence of the placenta prævia, which was really present until labor had actually begun. Like the wag's epitaph, "we cannot always sometimes tell" in these cases.

THE NEW PHARMACOPŒIA (1880), WITH SOME HINTS ON THERAPEUTICS.

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Pharmacy is the art which teaches the knowledge, choice, preservation, preparation, and combination of medicines, so as they shall produce their full results. Without some knowledge of pharmacy, a physician must be at a loss, for although therapeutics is distinct from pharmacy, yet some acquaintance with the latter is necessary to a correct application of the former.

The bases of both these studies is a knowledge of materia medica, or the substances employed in medicine.

In every civilized country there is some recognized work on standard drugs and their preparations, known as the Pharmacopœia. In all European countries it is prepared at the expense and has the sanction and authority of the government, and becomes a law at a certain fixed date; while, in this country, it is the voluntary action, both in its preparation and adoption, by a representative convention, meeting every ten years.

At a recent visit to Boston, at the centennial of the Massachusetts Medical Society, I had the pleasure of examining a complete series of all the pharmacopœias of the world. The first which was issued in this country was by the same Society in 1808, and the second by the New York Hospital in 1810; these never extended beyond their respective States. The first United States Pharmacopœia was published in Boston, December 15, 1820, just sixty-three years ago; a second edition of this same appearing in 1828.

In 1830, two pharmacopœias were published, one in New York and one in Philadelphia, owing to some misunderstanding on the part of the presiding officer. With the view of giving the various medical interests of the United States Government (which had not been done before) a proper representation in the convention of 1840, the Surgeon-General of the Army and the Senior Naval Surgeon at Washington were invited to participate in the proceedings. The convention appointed a Committee of Revision and Publication, consisting of seven members, three to form a quorum, and the meeting of the committee to be held at Philadelphia. To this committee were referred all communications received by the convention from the various organizations represented.

The committee was authorized (for the first time) to request the coöperation of the colleges of pharmacy in the United States. Valuable assistance was rendered to the committee by the colleges of pharmacy of Boston, New York and Philadelphia, especially the latter; at their suggestion and recommendation, the process of displacement or percolation was introduced for the first time. The work was not published until 1842, and the Latin version was omitted. Then followed the revisions of 1850, a second edition, 1855, 1863, and 1873. Then followed the call of Dr. James M. Morgan, the assistant secretary and last surviving officer of the convention of 1870.

Here let me pause, and for a few moments take a retrospective glance at the great and good men of our city, both of the medical and pharmaceutical profession, now deceased, who devoted their time and talents to this work, such as Drs. G. B. Wood, Franklin Bache, Joseph Carson, Robley Dunglison, and Robert Bridges, and on the other hand, Daniel B. Smith, Wm. Proctor, Thomas H. Powers, Edward Parrish, Wm. Hodgson, Augustus Duhamel—now passed from us, but leaving the remembrance of their devotion to their high calling, and the true work of good men, to the cause of medical science and philanthropy. May we who remain emulate their virtues; and whatsoever our hands find to do, "do it with our might, for the night cometh, when no man can work." (Ecclesiastes, ix. 10; John ix. 4.)

The Convention for the Sixth Decennial Revision of the Pharmacopœia of the United States of America met at the city of Washington, D. C., on the fifth day of May, 1880, and the work was compiled and published under the guidance and supervision of a Committee of Revision and Publication. The volume has 488 pages, issued by William Wood & Co., of New York, in 1882, which is now before us. "In its general character and tone it is pharmaceutical rather than therapeuti-

cal. That is owing to the pharmacists having done almost all the work. The divisions of the Pharmacopœia of 1870 into primary and secondary lists of drugs and preparations have been abolished, and single alphabetical arrangement adopted, similar to the British Pharmacopœia.

The drugs derived from the vegetable and animal kingdoms are briefly described as to their physical structure and chemical combinations, but not a word as to their physiological action, medical uses, doseage, or toxicological effects.

Processes for preparing chemical compounds have been omitted. This is proper where expensive apparatus and large quantities are required to be made, but not in the case of small preparations, as the iodide of mercury, etc. Except, in a few cases, each chemical is described, its physical properties, chemical reaction, and impurities and tests of purity. For pharmaceutical preparations, definite quantities of weight and measure are not employed, but by expressing the quantities by their relation to each other, except in the preparations of pills, the quantities being given in grains and grammes. Fluid extracts only grain weights are given, and for solid and liquids, except that the final product is to measure so many cubic centimetres.

The following table from the work exhibits the differences of strength of preparations made according to the Pharmacopœia* 1870, and the present (1880):

Name of Preparation.	*Number of parts of active constituents to 100 parts by weight of the preparation.*	
	Pharm. '70†.	Pharm. '80.
Acetum Lobellæ	13	10
Acetum Opii	16.3	10
Acetum Sanguinariæ	13	10
Acetum Scillæ	13	10
Acidum Aceticum	35	36
Acidum Aceticum Dilutum	4.5	6
Acidum Hydrochloricum Dilutum	7 8	10
Acidum Nitricum Dilutum	11.6	10
Acidum Phosphoricum Dilutum	9.8	10
Acidum Sulphuricum	about 100	96
Acidum Sulphuricum Dilutum	12.1	10
Acidum Sulphurosum	about 6.4	3.5
Alcohol Dilutum	39	45.5
Confectio Sennæ	8.33	10
Extractum Aconiti	Leaves.	Root.
Extractum Conii Alcoholicum	Leaves.	Fruit.
Ferri et Quiniæ Citrat.	16 quinine.	12 quinine
Liquor Acidi Arseniosi	0.87	1
Liquor Ferri Chloridi	35	39
Liquor Potassæ	5.8	5
Liquor Potassii Arsenitis	0.87	1
Liquor Sodæ	5.7	5
Opii Pulvis	10 or over	12 to 16
Opium	about 8	9 or over
Opium Denarcotisatum	—	14
Spiritus Anisi	6.8	10
Spiritus Camphoræ	14	10
Spiritus Cinnamomi	8	10
Spiritus Juniperi	2	3
Spiritus Lavendulæ	2	3
Spiritus Menthæ Piperitæ	6.4	10
Spiritus Menthæ Viridis	6.4	10
Spiritus Myristicæ	2	3
Tinctura Aconiti	47.6	40
Tinctura Aloes	3.3	10
Tinctura Aloes et Myrrhæ	each 12	each 10
Tinctura Arnicæ Florum	23	20
Tinctura Asafœtida	16	20
Tinctura Calumbæ	15	10
Tinctura Cannabis	36‡	20
Tinctura Cantharidis	3.5	5
Tinctura Capsici	3.5	5
Tinctura Catechu Compositæ	7	12
Tinctura Cinchonæ	25	20
Tinctura Conii	Leaves	Fruit.
Tinctura Cubebæ	15	10
Tinctura Gallæ	15	20
Tinctura Guaiaci	23	20
Tinctura Guaiaci Ammoniata	23	20
Tinctura Humuli	17.5	20
Tinctura Lobeliæ	15	20
Tinctura Myrrhæ	12	20
Tinctura Nucis Vomicæ	3.5 or less§	2§
Tinctura Opii ‖	9	10
Tinctura Opii Deodorata ‖	9	10
Tinctura Quassiæ	6	10
Tinctura Rhei	10	12
Tinctura Serpentariæ	15	10
Tinctura Stramonii	15	10
Tincturæ Valerianæ	15	20
Tinctura Valerianæ Ammoniata	15	20
Tinctura Veratri Viridis	55	50
Tinctura Zingiberis	31.8	20
Unguentum Acidi Carbolici	12	10
Unguentum Acidi Tannici	6	10
Unguentum Belladonnæ	12	10
Unguentum Gallæ	12	10
Unguentum Hydrargyri Ammoniati	8	10
Unguentum Hydrargyri Oxidi Flavi	8	10
Unguentum Stramonii	12	10
Unguentum Zinci Oxidi	16	20
Vinum Ergotæ	12.5	15
Vinum Opii	13	10
Vinum Rhei	14	10

*This table embraces all changes which can be considered sufficiently great to require notice, and all changes of above 1 per cent. in the strength of the preparations used internally. It does not note trifling changes in the composition of preparations intended for external use.

†For liquid galenical preparations the figures in this column are only approximately correct, as the calculations into parts by weight involve the specific gravity, which is subject to considerable variation.

‡In reality 6 of the extract, which is equivalent to about 36 of dry cannabis indica.

§Of dry extract.

‖The actual morphine strength is increased nearly one-half.

It will be noticed in the above table, that there have been changes in the strength of the liquid opium preparations, all of which except paregoric are made as to contain ten per cent. of opium, whilst the wine and vinegar are reduced from (wine) 13 to 10, (vinegar) 16.3 to 10. If the directions of the new Pharmacopœia are strictly followed out, the result will be a tincture which will contain on an average six grains of morphia to the fluid ounce, whilst our old laudanum has about four grains to the ounce.

If, therefore, the full anodyne dose of the tincture, deodorized tincture, or compound solution of opium has been 24 minims or 38 drops, representing a quarter of a grain of sulphate of morphia, the corresponding dose of the new preparations will be 16 minims, or say 25 drops.

This is an important change, and might be dangerous if not recognized; and even if it did not produce poisonous results, would be attended with headache, nausea, etc.

As observed by Dr. Squibb*, in physicians' prescriptions, for example, if deodorized tincture of opium is ordered, the figures "1870" or "1880" should be added, and he should give his dispensing pharmacist the liberty of using whichever preparation he might have, in the proper proportions of 1½ to 1, until the change becomes established. That is, if the 24 minims of the "1870" should be ordered, the pharmacist should use instead 16 minims of "1880," if he happens to have the new and not the old strength.

As the old preparation and the new are identical, excepting the morphia strength, it is only necessary to dilute two measures of the new preparation with one measure of menstruum to reduce them to the exact strength of the old preparation. For diluting the tincture of opium or the deodorized tincture of opium, diluted alcohol should be used. For diluting the compound solution of opium, alcohol should be used.

The diluted mineral acids are made of a uniform ten per cent. in strength, except in the case of hydrochloric and sulphuric, the former of which has been increased one-fourth in strength, while the latter has been decreased one-sixth. This will alter the dose in both. We find an important omission in Dover's powder: the sulphate of potassium is left out while the name is changed from pulvis ipecacuanhæ compositus (1870) to pulvis ipecacuanhæ et opii (1880).

(*To be continued.*)

* An Ephermeris, Nov. 1882, p. 151.

Hospital Reports.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. Seelye, A. M., M. D.

Cirrhosis.

Gentlemen: The case which I will first present to you is one which was transferred from the surgical to the medical department of this hospital, and it will therefore illustrate to you a very important fact which will frequently come under your observation, namely, that not all those cases which seem to demand surgical treatment will be justifiable recipients of it. This man applied to the surgical department for treatment for hemorrhoids; but the surgeons decided, as the hemorrhoids were only a part of a general constitutional disease, that they would not operate, but would transfer him to the medical department for treatment.

Here you see illustrated the value of medical experience in surgical practice, for because of lack of this many bad and unjustifiable surgical operations are performed. No conscientious and honest surgeon ever looks at a local difficulty without also taking into view all the general medical aspects of the case.

History.—Patient was admitted November 6. Age 30. Nationality Irish. A shoemaker. He was admitted to the surgical department October 8, 1881. He was given saline laxatives for his hemorrhoids, and improved under this treatment. He has been an occasional drinker of beer, but only moderately. There is no hereditary history of gout, rheumatism, or alcoholism. His father died from a sunstroke, and his mother had dropsy, and probably died from heart disease, which caused the dropsy. Patient had scarlet fever when a child. Has had no malaria or symptoms of syphilis. Eleven months ago he noticed that his stools were bloody, which was due to the presence of strawberry ulcers in the rectum, and from these hemorrhages he became very weak. These ulcers were healed for the time by local treatment. Ten months ago blood again appeared in his passages, and a soft mass would protrude from the anus, which at first went back of itself, but after a time it could be replaced with difficulty. Next gastric symptoms appeared, loss of appetite, with nausea and vomiting. The vomiting would come on after eating, and after it he would feel better. It contained no blood. He noticed a peculiar yellow staining of the skin, which still remains. He has no dropsy and no urinary symptoms. He is sore and tender over the lower portion of the chest and in the epigastrium. He complains of a burning sensation in the throat which renders swallowing difficult. Has some headache, and is constipated all the time. His appetite is now fair, but he is obliged to abstain from taking much food.

Gentlemen, the history of this patient presents some interesting points for study. And first in the hereditary history, on the mother's side, there are symptoms quite indicative of cardiac disease. In the patient's personal history there is nothing

of great importance until eleven months ago, when he began to suffer from hemorrhages from the bowels, which evidently proceeded from the rectum, because the surgeons traced it to the presence of strawberry ulcers. These were treated locally with good results. He then was comparatively well until ten months ago, when the hemorrhages returned and caused great exhaustion, and he began to be troubled with digestive disturbances. Now, you see, he looks much older than he is, and he might be taken to be forty-five years of age; his hair is becoming gray, and there are other indications of the degeneracy of age. His complexion is yellowish, but not quite so much so now as it has been. He has not a proper jaundice hue, but rather the hue seen in patients who have lost a good deal of blood, and sometimes called a subicteric hue. In ordinary jaundice there is some connection with the coloring matter of the bile. But in some diseases we get a deglobalization of the red blood-corpuscles, and these disintegrated globules give a color to the skin resembling jaundice, but it is not so extensive as that due to obstruction to the flow of the bile. In either case, the coloring matter of the blood is the basis of the color in jaundice. And whether it come from bilirubin, or hematin from degenerated blood globules, the ultimate cause is the same. You notice this subicteric hue here, but you see it is more marked on the face and hands, and the exposed parts generally, than over the general surface of the body. In all cases of discolored skin you will observe that the coloring is more intense in the parts which are exposed to the light.

Now the first point for objective examination would naturally be the rectum; but instead of making the examination myself, I will ask what were the conclusions of the surgeons who have already examined the case. I find that they discovered a number of internal piles, located in the rectum just beyond the sphincter, which still bleed. The blood is thinner than it was, and is more watery and of a different color; and because he has lost so much, it is now of that character seen in anæmic patients, where there is a great reduction in the number of red globules.

Now that the rectum has been examined, the next point is to search in the region of the liver for an explanation of this distension of the hemorrhoidal veins; for disorders in the liver are the most common cause of this.

Palpation.—The abdomen is very tender on the left side, from the free border of the ribs down along the course of the descending colon; and also over the stomach and spleen. Two inches left of the median line, and in the sixth intercostal space, is a very distinct point of tenderness, and there are others farther back in the axillary line. In fact, there is very marked tenderness over the whole of the left side. There is also some tenderness on the right side, especially along the free border of the ribs and lower down, but it is not so marked as on the left side. He winces readily and can not bear a touch anywhere. There is general hyperæsthesia, but this is more marked, you notice, over the region of the distribution of the intercostal nerves. This is not a localized tenderness and limited to the neighborhood of one organ, but it is general and found over a number of organs; but the points at which it is most marked are along the course and distribution of the intercostal nerves.

Percussion.—I begin percussing low down on the right side of the abdomen, and here I get the resonance of hollow viscera, which continues upward until I get dullness at the lower margin of the liver, which is here in the eighth intercostal space. The upper margin of liver dullness I find in the sixth intercostal space. Now on the left side I find an increased area of splenic dullness which extends toward the free margin of the ribs, and it is bounded above in the ninth intercostal space by pulmonary resonance. This shows that the organ is enlarged. I now notice that the superficial abdominal veins are enlarged, but this is not as pronounced as it usually is in cases of atrophied liver. The upper margin of precordial dullness is here in the third intercostal space, and the vertical line is just inside the nipple, as it should be. But the apex beat is not in the fifth intercostal space as it should be, but it is lower down and just inside the nipple line. There is good pulmonary resonance over both lungs. There is no increase of dullness in the epigastric region, as evidence of a tumor at the pyloric orifice of the stomach, or in the left lobe of the liver. The area of gastric resonance is increased, and as a result the diaphragm is elevated.

Auscultation.—I hear a mitral systolic, and a direct murmur at the base of the heart. Now the question is, is this a functional murmur merely, due to the anæmic and watery condition of the blood, or is it an organic murmur, due to stenosis of the aortic valves and insufficiency of the mitral? I find the respiratory murmur good posteriorly as well as in front, and there is no evidence of fluid in the pleural cavity, or of congestion in the lungs. In the neck there is a visible distention of the jugular veins on both sides, and they are as large as my little finger, and I can see an apparent pulsation of the veins. I say apparent, for I think it is only apparent in this case. A pulsation in the cervical veins does occur in disease of the right heart, but here I think it is only due to a lifting of the vein by the artery beneath. The conjunctiva have a bluish, or rather a bluish white tint, and are of a subicteric hue, such as you get in cases of extreme anemia. The pulse is soft, very compressible, regular, and beats seventy-eight a minute. On compressing the artery it feels somewhat india-rubber like, or like a thin tendon movable under the finger, which is not a natural sensation for a healthy artery.

Now gentlemen, let us briefly review what the objective examination shows. He has the color of a man who has lost much blood, either from hemorrhage or through the disintegration of blood corpuscles from one cause or another. We also find evidences of reduction in the size of the liver and increased size of the spleen, and a farther evidence of portal obstruction, is the increased size and prominence of the epigastric veins, which go up to meet the internal mammary veins, and so supplement the obstructed portal circulation. There is nothing abnormal in the lungs. The apex beat being in the sixth intercostal space, is evidence of an enlarged heart. There are mitral and aortic murmurs, which are loud and blowing

in character; and considerable enlargement of the jugular veins, and an apparent pulsation in them. The radial pulse is regular, not too frequent, and compressible, but it shows indications of degeneration.

These are the principal facts in the case.

We found a reduction in the size of the liver, and this will account for the hemorrhoidal trouble, and the splenic enlargement. So far so good. But will the cirrhosis account for all the symptoms, and is it the only disease? It accounts for the hemorrhage from the bowels, but will it alone account for the great anæmia also; or is there some other disease in addition to this, which is destroying the integrity of the blood? You remember that he has had a good deal of difficulty with his digestion, and has suffered from nausea and vomiting and distress after eating, and from flatulence and acid eructations. What do these symptoms indicate? Not necessarily organic disease of the stomach. Do we not expect to get gastritis with cirrhosis? Certainly. And in such a dyspepsia have we not an additional cause for defective nutrition, and consequently for the anæmia here present? Yes, I think we have in this starving process a sufficient cause for the extreme anæmia. The specific gravity of his urine is lower than normal, and he passes an excessive quantity, but it contains no albumen or casts. So we do not find here any evidence of renal disease to account for the anæmia. But is there any other possible cause, provided we do not consider the liver and gastric diseases a sufficient explanation? On observing his complexion, we notice that while it is suggestive of anæmia, yet at the same time it has something of that cachetic appearance which has been considered indicative of cancer. So we must consider the question of the existence of a cancer somewhere. If anywhere, it is probably in the stomach, for primary cancer of the liver is very rare. It is possible that this additional complication exists here, but I do not believe it is necessary that it should be present to account for his physical appearance. I think that the cirrhosis and the gastric catarrh are alone a sufficient cause.

But you may say, is it not strange that there is no abdominal dropsy if the man has cirrhosis? I reply that dropsy is an accompaniment of the final stage of this disease; and it is not necessary that it should occur at all, for the patient may die before he reaches that stage. Again you may say, is it not strange that the man should have cirrhosis when he has not been a drinker of alcoholic liquors? Perhaps you are accustomed always to associate cirrhosis with alcoholism. But this is a mistake. It may occur in a child, as I have seen it, or in an adult who has never been a user of alcohol. I remember the case of a gentleman who had not been a drinker, where there was a general sclerosis, and a diseased condition of the connective tissue of all the parenchymatous organs. There was an atrophied and granular liver, and atrophied and granular kidneys, and sclerosed arteries and a general sclerotic degeneration throughout. And I am strongly inclined to believe that this is about the condition which we have in this man's case. Here, then, we have a man only thirty years of age, who presents evidences of senility, and has a contracted liver and degenerated arteries, and perhaps contracted kidneys, judging from the increased amount of urine passed and its low specific gravity. And I think we may explain the extreme anæmia by the loss of blood from hemorrhoids, and by the defective nutrition caused by the digestive disturbances.

Now what is to be done for such a case? If there is cirrhosis and a general sclerotic degeneration, in the first place you are not going to check this degenerative process. For progressiveness is one of the immediate and inevitable conditions in this disease. You cannot stop a man from growing old, whether it be from years or from other causes of degeneration. But you can do something to prolong life, and to make existence more comfortable. In this case, therefore, it is desirable in the first place to check this outflow of blood as much as you can. He has been sent to us from the surgical side, because they did not think it advisable to treat the hemorrhoids surgically; but may we not do something to check this bleeding by means of medicines? I think so. And for this purpose he is taking saline cathartics; and since this treatment was begun he has not had nearly as much hemorrhage as before. This treatment also improves the gastric catarrh, for the saline purgatives reduce the congestion in the mucous membranes of the alimentary canal, and wash off the thick mucous accumulations. The patient should only be allowed to take easily digested food, for the gastric troubles are aggravated by any food that is likely to cause fermentation in the stomach, such as sweets and starchy foods. The choice of foods must, therefore, be made on the basis of excluding everything which may cause acid fermentation. This excludes all fruits, preserves, and sweets. You can not be too careful about giving definite directions for the diet in these cases. Though some may say this is foolishness to be so particular about a little thing, yet it is not foolishness. It is by neglect to give such directions that we often perpetuate the distress of the patient. You must not yield to the desires of the patient or his friends, but you must give your directions as if you yourself believed in them, and as if you knew that harm would result from a failure to carry them out. This patient must have nothing but animal food, such as milk, eggs, and beef tea. And if any starch at all is given, it must be in the form of wheat bread. No saccharine or starchy vegetables should be eaten in any quantity.

You notice I have not said anything about medicine other than the salines. But there is very little to say about them, so far as a cure or palliation is concerned. Medicines are not of much use here, but for the anæmia you may give iron in some form, and perhaps it is better given with some of the alkalies, for with them it seems to be more easily assimilated and to do more good than when given in other ways. The treatment must be entirely palliative, for you cannot do much for the cure of this disease.

Eczema.

I wish to show you next, gentlemen, a little girl who came into the hospital ten days ago with a general eczema extending over the whole body, from the crown of her head to the soles of her

feet. Her hair was thickly matted together, and the surface of her body was as red as a lobster. The epidermis was removed in places, and her skin was very tender. The face, lips, and eyelids were swollen, and the ears were quite shapeless. As you see her now, the severity of the symptoms has been much reduced. The inflammatory exudation which had matted the hair into a shapeless mass has now been removed to a considerable extent, and the face is of a nearly natural color, but it still shows some desquamation. On the legs you see further evidences of the disease. When she first came in, they were much swollen, and were œdematous and red, and discharging a serous fluid from many points, and in many places there were thick crusts of dessicated serum. Now though not in an entirely satisfactory, yet they are in a good condition. The skin is still indurated on some portions of the thigh and on the legs. The disease is resolving over the whole body, though we still have here shown all the regular peculiarities of a general eczema. This may be called a hypothogenetic eczema, for its cause is not known; but it is probably due to some morbid condition of the blood. Swelling, redness, and an exudation which forms into crusts or scales, are the objective characteristics of this disease. But an important subjective symptom, which was also present in this case, is an intolerable itching, which makes the child irritable and sleepless.

When she first came in, she was put on appropriate treatment. The first night's rest was procured by means of opium. This was done because in this disease the trouble is always aggravated by the exhaustion of the nervous strength brought about by sleeplessness, which results from the distressing itching. In any disease where we have itching and wakefulness, there is a loss of nervous tone from the deprivation of rest, and this aggravates the disease. Good rest must therefore be procured first, and something must be given to produce sleep. A good local application, which is both protective and stimulant, is to cover the surface of the body with an ointment made as follows:

R.	Zinci oxidi,	℥j.
	Olei juniperi,	℥j.
	Adipis,	℥j.
M.	Sig. Use as an ointment.	

This ointment was spread over the child's body, and where the epidermis had been removed a layer of lint was put over the part, and the ointment was spread over this. The next day she was better, and so the opium and the local application were kept up for some time. As constitutional treatment, she took salines every morning to prevent constipation, and the salts of potash as a diuretic. She has so improved that I think in a short time, or in about six weeks from the time of her entrance, she will be well.

I hope, gentlemen, the day is not far distant when some of you will distinguish yourselves by curing a case of general eczema, either in a child or an adult. For curing this disease will give a physician more reputation than almost any other achievement. And it can be cured by patient and long-continued efforts.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Tubercular Cerebro-Spinal Meningitis.

BY J. T. ESKRIDGE, M. D.,

Physician to the St. Mary's and Jefferson Medical College Hospitals.

[Read April 4, 1883.]

(*Continued from page* 12.)

18*th*. There was some twitching of the muscles of the extreuities, especially of the hands and feet. The breathing was the Cheyne-Stokes variety. One forty-eighth of a grain of morphia was required to relieve pain, it being the first day that an anodyne had been necessary since June 1st, a little more than two months; Increasing quantities of morphia were required almost daily the remainder of the month, the child being feverish and restless every afternoon, and frequently screaming violently from head-pain. The range of temperature for the last eight or ten days of the month was from 100° to 102.5°.

On the 25th, 26th, and 27th, Cheyne-Stokes respiration, minus the intermission, was present; and on the 28th, typical Cheyne-Stokes breathing lasting one day only.

September. My notes of the case for the 1st, 2d, and as late as 4 p. m., of the 3d instant, show a normal axillary temperature, and fairly good pulse and respiration, but the surface temperatures of the head at the 4 p. m. examination of the 3d were 1° higher than the axillary. After having been comparatively quiet for nearly two months, and resting well during the previous two days, it began to cry with apparent head-pain. The pupils were widely dilated. It screamed furiously, and almost immediately, while the thermometers were still on the head, became convulsed. At first every muscle appeared to be rigid, the posterior muscles of the neck and those of the back being most contracted, and producing an extreme condition of opisthotonos. The eyes rolled from side to side, and a few spasmodic movements of the muscles of the body took place. The spasmodic seizure lasted abont half an hour, but the leg muscles remained rigid much longer. Respirations were 68 and the pulse 130. At 9 a. m. the next day it had another convulsion, which soon passed off, leaving a number of muscles contracted. At 10 a. m., I found the muscles of the back of the neck, and the flexors of the legs and arms, and the extensors of the feet, firmly contracted. Twitching of the facial muscles took place occasionally, each spasmodic contraction of these muscles being attended by a scream from the child indicative of great suffering. Temp. 103.5°; pulse 148; resp. 16. The head temperatures were a half degree below the axillary. The axillary and head temperatures continued to rise until the former reached 104° and the latter 103.5°. The condition of the muscles remained nearly the same during the day, except those connected with the eyeballs, which became more affected, and kept up a continuous nystagmus. The respirations became very slow and irregular, the pause often being from ten to fifteen seconds.

in length. 10 p. m., temp. 103.5°; pulse 140; resp. 8. Numerous bronchial rales were heard throughout the chest. During the next two days the temperature varied from 102.5° to 103°; pulse from 140 to 150, and respiration from 28 to 34. The spasmodic movements of the facial muscles ceased, the back muscles of the neck and the flexors of the arms relaxed, but the adductors of the legs and the extensors of the feet remained contracted, and so continued gradually increasing until the death of the child, nearly three months later. The following week the temperature ranged from 97° to 100.5°, the average being about 99°. The axillary temperature was frequently lower than the surface temperatures of the head. The breathing was of the Cheyne-Stokes variety once or twice, and on a few occasions it was slow and irregular. The head was retracted about one-half the time, that condition always being associated with symptoms of pain, irritability, and heightened general and surface temperatures. Small doses of morphia (one-fourth to one-eighth of a grain) were sufficient to quiet the child.

13th. 10 a. m., temperature 93.8°; pulse 96; respiration 14. The head temperatures were about 5° higher than the axillary. After that date, to maintain the body heat, it was necessary to have bottles filled with hot water, and to keep them constantly applied to the extremities. The remainder of the month the temperature did not descend below 95°. The deformity of the legs and feet became more marked. The legs were forcibly crossed near the body, and the feet were extremely inverted and extended. A straight line drawn from the anterior surface of the knee to the upper surface of the tarso-phalangeal joint of the great toe passed through the instep, and one drawn from the popliteal space to the under surface of the same joint of the toe just touched the under surface of the heel. The child was peevish and fretful most of the time. An afternoon rise of temperature was the rule.

On the 28th, the biceps muscle of the right arm was noticed to be contracted. The next day it was more flexed, and the pulse was intermittent. The head became so much retracted about the latter part of the month that deglutition was very difficult. To relieve that condition an issue was established by means of Vienna paste over the upper portion of the cervical spine. After this the head was rarely retracted, and then only to a slight degree.

October.—The general condition of the child continued about the same, the right arm still being flexed. On the 6th, the left arm was first noticed to be affected, the flexed muscles of the forearm being contracted, and the hand deflected to the ulnar side. From that date the arm, like the leg muscles, continued to become more firmly contracted. The right arm was drawn in front of the chest and firmly held against it, the forearm being flexed so that the closed fist was under the chin, making it necessary to cover the hand with cotton to prevent its interfering with respiration and deglutition. The biceps muscle of the left arm was never firmly contracted, the flexors of the left forearm being mainly affected. The left hand was forcibly flexed upon the forearm, and turned to the ulnar side, the finger-nails striking the first phalanx of the thumb. The palm of each hand was padded with cotton to prevent injury by the nails. During the month the axillary temperature varied from 98° to 101.2°, the average being nearly 100°. The head temperatures were a little lower than the axillary. On the 10th, both eyes were turned to the left, and occasionally moved spasmodically downward and far over toward the left side. The eyes remained deflected toward this side, but at times they were nearly straight. Spasmodic movements of the eyes in various directions were noticed when the child suffered much pain. More or less morphia, sometimes a grain in the twenty-four hours, was required the greater portion of the time. From the 18th to the 29th, respiration was of the Cheyne-Stokes variety, the child being restless and suffering pain most of the time. Occasional spasmodic twitchings of various muscles of the body were noticed, those of the face and arms being most affected. The clonic, spasmodic movements seemed to be caused by increased cerebral irritation, and were almost invariably followed by screams from the little sufferer. At those times the permanent contractures were worse. On the 24th, two grains of morphia were given before pain was relieved. The child had been noticed to stare meaninglessly for several days, but it was not found to be entirely blind until the 29th. At that time an ophthalmoscopic examination of tha fundus of each eye showed both optic discs to be very white and apparently slightly swollen.

November. The first twenty days of the month the child was comparatively quiet, ate well, seemed to gain some flesh, and was generally quiet without morphia. During that period it was most irritable the 3d and 11th, but it did not have much rise of temperature on those days. The child was worse every second day.

21st and 22d. There were numerous bronchial rales, but no fever, the breathing seeming to be a little more labored than usual.

23d. Temp. 98°; pulse 108; resp. 28. Large bronchial and subcrepitant rales abundant.

24th. 10 a. m., temp. 96.7°; pulse 130; resp. 40. 6 p. m., temp. 99.6°; pulse 140; resp. 52. Impaired resonance posteriorly; crepitant and subcrepitant rales were observed.

25th. 10 a. m., temp. 101°; pulse 160; resp. 80. Marked dullness was found over the lower portion of both lungs posteriorly. The child took no notice of anything, but swallowed when liquid food was placed in the mouth. 6 p. m., temp. 101.5°; pulse 165; resp. 92. The respiration was ascending and descending, but no intermissions, as in the Cheyne-Stokes type, occurred.

26th. It died at 2 a. m., being able to swallow five minutes before death; no convulsions occurred. The breathing became very slow a short time before life was extinct.

Sectio cadaveris was made twelve hours after death by Drs. C. K. Mills, I. E. Roberts, and myself.

Rigor mortis was just beginning; skin was rough, wrinkled, and very thin. There was great emaciation, the subcutaneous fat having been entirely absorbed. When the child was one year old it weighed twenty-five pounds, but after death, the age being about two years, its weight was only eleven pounds, although its height was

probably greater than that of most children of the same age.

Head. Circumference twenty inches, transverse arch (from mastoid to mastoid) fourteen inches; right half of arch to sagittal suture six and seven-eighths inches, left half seven and one-eighth inches. The head did not seem greatly enlarged. All the bony sutures had closed externally except at the junction of the coronal and sagittal. The skullcap was so thin and yielding, bending like bonnet-board before the saw, that much care had to be exercised in its removal to prevent injuring the brain or its soft coverings. The dura mater was not more adherent to the bone than is usual in children of one or two years of age, except along the line of the sagittal suture, where it became necessary to sever its connections with the bone by the use of considerable force, aided by the knife. After the skullcap was removed, all the sutures were found to be closed internally. The internal surface of the bony cap was smooth, the bones being very transparent, and measuring in the temporal regions from one-fortieth to one-thirty-second of an inch in thickness, and in other situations from one-twelfth to one-eighth of an inch. The dura mater was thin and pale, and its sinuses were nearly empty, containing no clots, and but little blood. The pia mater on the convexity of the brain was so attenuated and transparent that it was difficult to distinguish its presence. The various fissures, primary and secondary, could be traced without removing this membrane. The pia mater over the orbital surfaces of the frontal, the basal surfaces of the temporal and occipital lobes presented the same attenuated, transparent appearance seen on the convexity. The membrane covering the anterior and posterior subarachnoidian spaces on first exposure seemed to be opaque, but on cutting it a serous fluid escaped, leaving it of the usual appearance. A few millimetres to the left of the optic chiasm, two yellowish-white spots about one-eighth of an inch in their greatest dimensions, were seen in the substance of the pia mater.

The convex surfaces of both hemispheres of the brain on palpation gave decided fluctuation. On cutting into the lateral ventricles, they were found filled with a colorless watery fluid. The bodies and horns of these ventricles were enormously dilated. The foramen of Monro, the third and fourth ventricles, and the Sylvian aqueduct, were enlarged to about two or three times their normal dimensions. On examining the walls of the lateral ventricles and their much dilated horns, prominent veins could be seen everywhere forming beautiful arborescent appearances. The veins of the intra-ventricular striate bodies, the veins of the choroid plexuses, and the veins of Galen themselves, were enlarged and prominent. The ventricular fluid measured fifteen ounces. Measuring from the anterior extremity of the anterior horn to the posterior extremity of the posterior horn, the greatest length of each lateral ventricle was six and a quarter inches. Both ventricles appeared to be dilated equally. The thickness of the brain substance constituting the walls of the lateral ventricles was measured at several points. It was thinnest in the region bounding the dilated posterior horn, within and below, where it measured about one-sixth of an inch. Sections through the gray and white matters showed no punctæ vasculosæ, the brain-substance throughout being markedly bloodless. It was firm and cut cleanly, not adhering to the knife.

The cervical and upper dorsal portions of the spinal cord and its membranes presented nothing abnormal on macroscopic examination.

Thorax. No pleuritic adhesions or effusion. The smaller bronchial tubes were nearly filled with muco-pus. The lower and posterior portions of the lungs were œdematous and congested. The apices of the lungs were firmer than normal, and in the right apex a small cicatrix and several little nodules. The heart was very small, but apparently normal. The abdominal organs were not examined.

Parts of the brain and the cervical portion of the spinal cord and their membranes, and a small piece of the apex of the right lung, were properly hardened and sent to Dr. L. Brewer Hall, a practical microscopist, for examination. The results of his examination he gives as follows:

"Sections of the spinal cord and membranes show oval masses of rounded cells along the vessels of the dura mater, lying chiefly outside their walls. In some places the coats of the vessels are thickened; the nervous tissue appears normal. Similar appearances are occasionally seen in the membranes of the brain; many sections, however, show nothing abnormal. In the apex of the lung there are minute inflammatory spots, visible in some of the sections only. Parts of these consist of rounded cells about and within a bronchus, but others are surrounding blood-vessels and not encroaching upon their calibres.

"The pathological condition is tubercle, chiefly of the membranes of the spinal cord, less abundant in the meninges of the brain, and rare and small, though present, in the lung."

In the history of the case which I have given in detail to-night, periodicity of temperature, attended by numerous exaggerated symptoms of brain disturbance, was well marked. During these periods, in which the case ran a less acute course, a slight exacerbation of fever was noticed nearly every alternate day. After the first few weeks of the disease, when the fever began to reach its highest points, the paroxysms of fever, headache, and restlessness varied from a few hours to one or two days. The fever invariably passed off by free perspiration. On some days the fever was of the remittent type, and on others, of the intermittent. I have frequently observed a striking similarity between the temperature variations of malarial fevers and those due to brain diseases; but in no instance have I seen the temperature of the latter diseases resemble that of the former when the membranes or cortical substance of the brain was uninvolved by disease. Fevers of cerebral origin differ from those of malarial poisoning, in that the paroxysms of the former are less regular in their occurrence and duration, and are not so easily prevented by large doses of quinine, although in the case reported in this paper, large daily qantities of quinine seemed to prevent excessive rise of temperature, and apparently lessened the frequency of the paroxysms.

During the first few days of the child's sickness, the diagnosis was between spurious hydrocepha-

lus, acute meningitis, tubercular meningitis, and sporadic cerebro-spinal meningitis; later between the last two and chronic hydrocephalus. A careful study of the morbid anatomy of this case, however, discovers no lesion that is not found in one or more of the above diseases; yet the clinical history, when taken in connection with the varying records given by the body and head temperatures, shows the disease to be possessed of a certain individuality, which, with a number of carefully studied histories, we might be able to recognize.

The quantities of morphia, two to three grains in twenty-four hours, which were given to a child less than two years old without producing death, seem almost incredible. At first, twenty drops of camphorated tincture of opium were sufficient to quiet the child for a short time, but this preparation of opium was gradually increased until about two ounces were necessary for twenty-four hours. In the same way morphia was increased as toleration was estabished, the maximum quantity only being reached after regularly giving the drug a number of weeks. After having discontinued the use of morphia two months, the return of head-pain compelled me to again resort to it. This time, also, small doses were at first sufficient to quiet the child, but in the course of a few weeks one-third to one-half grain doses were required. While large doses of opium were being administered, neither diarrhœa nor vomiting was present.

(*To be continued.*)

Editorial Department.

Periscope.

The Blood-vessels of New Growths with Special Reference to their Origin in Granulation Tissue.

Before the Academy of Medicine in Ireland (*Med. Press*, March 21, 1883), Mr. P. S. Abraham read a paper on this subject, in which he said:

The blood-vessels which are seen in sections of tumors, may be considered under two heads—(1) those belonging to the proper tissue of the part into which the neoplasm has infiltrated; and (2) those which have arisen anew, and belong to the new growth itself. The former have become enveloped by the new invading tissue, which they afterwards, in greater or less part, supply. The latter are the vessels of circumscribed growth, and are either prolongations or sproutings from the vessels of the neighboring tissue, or, formed apart, have been subsequently connected with them. The small arteries and veins which come under the first category are often distinctly modified by what appear to be inflammatory changes, and the proliferation of the cells of the coats may go on to such an extent in the case of the intestine that the lumen may become occluded. An extreme case of the vascular wall thickened and studded with an irregular cell-growth is seen in certain sections of leprous tumor. The young blood-vessels of neoplasmata in general do not always show any distinction of tunica; and sometimes, in a quickly-growing mass of cells, the walls of the vascular channels can scarcely be differentiated from the surrounding cell tissue. From the consideration of the sections of granulation tissue which had formed in sponges placed for various periods in wounds, and on theoretical grounds, it seems unlikely that Prof. Hamilton's new and ingenious mechanical theory for the formation of granulation vessels will be altogether accepted. In the specimens shown, the vessels branch freely and inoculate among the fibres of the sponge; they give off shoots of different sizes, and there is abundant evidence of a new formation of capillaries going on, much in the manner described by Arnold. Even if the capillary blood pressure were sufficient to produce the mechanical effect of forcing out and elongating the capillary loops, it is difficult to understand how that pressure could cause the cell multiplication which goes on in the wall of the elongating capillary. The cells of the wall, indeed, are not simply stretched—they increase in number by division, and the wall of the capillary grows. Several other arguments were brought forward, and in conclusion it was remarked that, as Prof. Hamilton shows, a thrombus in a ligatured artery becomes vascular by the throwing in of granulation loops from the vasa vasorum near the point of ligature—in his own words, "it is nothing more than a granulating surface within a vessel." If this be the case, the pushing in of the loops must be against an intra-arterial pressure, certainly greater than that of the blood in the vasa.

Minute Pathology.

The *Med. Times and Gaz.* says that Fehleisen has cultivated micrococci taken from the lymphatic vessels and subcutaneous connective tissue of patients suffering from erysipelas. The bacteria were bred on Koch's preparation of meat-peptone-gelatine, which prevented their diffusion, and allowed the cultivation of a pure type. Inoculations were performed on rabbits and on man with success. Prompted by the knowledge that erysipelas has done good in some cases of tumors of the skin, the following procedure was carried out: Some of the fluid containing bacteria of the fourth generation was taken, and inoculated by five punctures into the surface of a tumor situate on the left buttock; four days later, genuine erysipelas, with shivering and high fever set in. The whole erysipelatous process lasted ten days, and ended in recovery. The patient was fifty-eight years of age, and was the subject of multiple tumors of the skin. The smaller superficial nodules on the tumor became softer, and completely

disappeared during the first few days of the induced erysipelas, but the main mass only diminished a little in size. Bockhart conducted a pure cultivation, up to the fourth generation, of micrococci derived from the discharges of gonorrhœa. Some of the material from the fourth breed was transferred to the mucous membrane of the urethra of a paralytic patient, aged forty-eight years. In forty-eight hours the external meatus was reddened, and pressure on it yielded a slimy secretion. On the third day a drop of pus could be expressed; and on the sixth day as much as seventeen cubic centimetres were collected by pressure on the urethra. The patient died on the twelfth day of hypostatic pneumonia. The fossa navicularis especially was found to be the seat of a tenacious sanguineo-purulent secretion. In preparations made from this neighborhood enormous quantities of bacteria were found in the nuclei of the white blood corpuscles. No micrococci were detected in the epithelial cells. The lymphatic vessels and fissures in the connective tissue of the same region were blocked apparently by the "gonococci."

Post Mortem Examination of a Hibernating Snake.

Dr. H. B. Stanley reports the following in the *Pacific Medical and Surgical Journal*, April, 1883:

On the 14th day of February, 1883, one of my neighbors, while digging among some rocks near this place, suddenly came upon the winter quarters of a small "bull snake." The serpent was in a torpid state from the cold weather and was easily killed. During the afternoon of the 15th I happened to be at the place where it was killed, and procured it for examination. It measured three and a half feet in length, and weighed seven ounces. On opening the body, the stomach was found to be entirely empty; the bowels were almost empty, containing only a small amount of creamy-looking substance in the lower bowel, streaked and tinged with something greenish resembling bile. Being a female, the parts answering to ovaries were large and congested, and each consisted of twenty-six distinct parts or divisions. The liver was very small and pale. The gall-bladder was large and full of bile, containing nearly half a fluid drachm. The lungs were fully inflated and extended on each side of the spinal column nearly the whole of the middle third of the body. The heart and arteries were nearly full of bright red blood. The spleen was seven inches long, and weighed one-fourth of an ounce, which it will be seen was one-twenty-eighth of the weight of the entire animal. It was of a dark red color and seemed to be rich in blood.

Is it probable that this enormous spleen serves as a reservoir of nourishment upon which the animal lives after its stock of adipose tissue is gone? The cavity of the body contained but very little fat, perhaps not more than ten grains. Snakes at this altitude usually go into winter quarters about the 20th of October, and emerge from their winter homes about the last of April, or fifteen days earlier if the weather be warm. This gives them a period of about six months in which they take no food. If not for the purpose of nourishing the body during this long fasting period, what can be the use of such an enormous spleen?

Removing a Large Portion of Upper Lip Without Deformity.

For an extensive epithelioma of the upper lip, Mr. Richard Bardwell devised the following operation (*Med. Press*, May 2, 1883):

The base line of the triangle requiring removal was measured, and an equal line marked by a superficial incision extending from the corner of the mouth directly outward. The other sides of the triangle, also measured, were similarly traced from this line downward towards the ramus of the jaw. Thus was traced outside and below the mouth a triangular space exactly like that to be removed from the upper lip, but reversed. The first—the horizontal—incision was now deepened down to, but not into, the mucous membrane; then the two lateral limbs of the triangle were incised through all tissues into the mouth, and some bleeding vessels were twisted. The thick tissues of the flap were dissected from the mucous membrane, left hanging to the horizontal incision, to which, the extreme point being sacrificed, it was stitched, thus giving to that part a red border. The next step was the excision of the epithelioma along the lines already traced and measured. The edges of the lower of what may be called the complementary triangle were now brought together with twisted suture. In doing this it is to be noted that the horizontal base line of the complementary triangle was necessarily shifted inwards, and coming to lie above the lower lip, took the place of that part of the upper lip which had been removed with the cancer. The new red border, made by turning up the mucous membrane of the cheek, imitated the natural red of the lip. The edges of the wound in the upper lip were now brought together with hare-lip pins, and the new mucous edging sewn with horse-hair, both to where it joined the old and at the commissure of the mouth. When all was complete, no deformity was left. The man recovered rapidly, and when seen two months after operation his mouth was as nearly perfect in form as previous to operation, nor did its movements appear in any way irregular or constrained.

The Removal of a Deep Sebaceous Cyst of the Neck, Through the Mouth—No External Scar.

These cysts appear as tumours of a globular or or ovoid shape, with a smooth and even surface, and are tense and elastic to the touch; whilst, with one finger in the mouth and the other pressing upon the swelling in the neck, fluctuation can be distinctly felt through them.

Removing them externally would leave an ugly disfigurement, so Dr. W. J. Walsham recommends (*Lancet*, May 5, 1883), the following operation: The patient having been brought under the influence of chloroform, a gag placed in the mouth, and the tongue drawn over to the left side, an incision was made in the floor of the mouth from opposite the last molar tooth to the symphysis, and the sublingual gland having been turned to one side, the wall of the cyst was exposed. The capsule was opened, and the cyst separated with the finger quite easily from its posterior, external, and anterior connexions. On its inner or deeper aspect the enucleation was less readily accomplished, several prolongations extending among

the muscles of the tongue and hyoid bone. In freeing the deeper parts, the cyst wall, which up to this time had remained unbroken, was ruptured at its upper part by coming into contact with the teeth. After evacuating the greater part of the contents (pseudo-sebaceous or porridge-like material), carefully preventing any from entering the wound, the whole cyst, with its deep ramifications, was completely removed. There was no hemorrhage; the wound therefore was not plugged, but only a small piece of oiled lint placed in it superficially to prevent its closing, and a bandage applied to the neck so as to make gentle pressure upon its deeper parts. With the exception of a sharp rise of temperature on the morning after the operation, which rapidly subsided on removing the lint from the wound, the patient convalesced without a bad symptom. The wound was syringed out hourly with a weak solution of carbolic acid (1 in 100), and gentle pressure continued on the neck by means of a bandage. It completely healed in a fortnight, and the patient was discharged at the end of three weeks without a trace of any external swelling in the neck.

Explosive Mixtures.

From the *Cinn. Lan. and Clinic*, March 17, 1883, we note as follows:

1. Hypophosphite of lime, chlorate of potash, and sulphate of iron, mixed in equal proportions, are explosive.
2. A solution of one part of chromic acid and two of glycerin.
3. Chlorate of potash and dental powders containing carbon explode in the mouth.
4. A pilular mass containing permanganate of potash mixed with vegetable extracts and iron, easily inflames.
5. Chlorate of potash or the permanganate or other explosive substances must not be triturated with glycerin.—*Rev. Cienc. Méd.—Rev. Méd. Quirurgia.*

Chlorate of potash and tannin explode if triturated; as do chlorate of potash and sugar. Iodine or an iodide and a nitrate may explode.—*Virginia Med. Monthly.*

The *Pharmacist*, March, 1883, says: When picric acid is introduced into a vessel containing ozone, a violent detonation instantaneously takes place, a new proof of the danger attending experiments with nitrogenous compounds containing nitrogen only loosely bound.

A Curious Parasite.

The *Lancet*, March 24, 1883, says:

At the last meeting of the Linnean Society Dr. Cobbold described a worm which he called Simondsia paradoxa. It is a nematode, the male living free in the stomach of the hog, whilst the female is lodged in cysts within the walls of the stomach. Although discovered thirty years ago by Professor Simonds, the worm has never been properly examined. The strange thing is that the female carries outside its body a large rosette-shaped organ. This the author of the paper considers to be the uterus, and compares it to the generative apparatus of Spharularia bombi. If Schneider's view be correct the prolapsed uterus of the nematoid of the humble bee is nearly thirty thousand times larger than the matetnal worm. The latter is a mere appendage, and was regarded by Sir John Lubbock as the male. Dr. Cobbold thinks that the branched rosette of Simondsia is homologous with the overgrown prelapsed uterus of Spharularia bombi.

Reviews and Book Notices.

BOOK NOTICES.

Hand-book of Electro-Therapeutics, by Dr. Wilhelm Erb, translated by L. Putzel, M.D., neurologist to Randall's Island Hospital, etc., pp. 306, New York, William Wood & Company, 1883.

This volume constitutes the June number of Wood's Library of standard medical authors. Like many of its predecessors it is a valuable work, and treats of a subject possessing great importance, yet but imperfectly comprehended by the majority of physicians. Electricity is certainly a most potent therapeutic resource, and our acquaintance with its marvellous properties, is very limited, but small as it is, no physician can intelligently practice his profession without an acquantance with it. The author is a professor in the University of Leipzig.

Gout in Its Protean Aspects, by J. Milner Fothergill, M. D. Detroit, Michigan, George S. Davis. Cloth-bound, 16mo. embossed. 300 pages, heavy paper. Price, $2.50.

Gout is a puzzling problem; if any other disease will bother a conscientious physician more or make more money for a conscienceless physician, we have yet to hear about it. Like all other diseases that are usually regarded as dependent upon dietetic errors and difficult to cure, gout is usually treated upon routine principles, and very little time is devoted to the literature of the subject. That this is a mistake, a careful perusal of Dr. Fothergill's excellent work will make manifest. The following are the special subjects considered: "The Blood and Urine in Gout," "Pathological Changes Wrought by Gout Poison, External and Internal Manifestations," "Diagnosis, Prognosis and Causes of Gout," "Acute Gout," "Treatment of Chronic Gout," "Treatment of the Paroxysm," "Rheumatic Gout," "Chronic Rheumatism." Dr. Fothergill is a delightfully pleasant and lucid writer; he can take the most uninteresting subject and by his magic pen, weave about it a mesh of language so easy and so flowing that it becomes a positive pleasure to read. We highly commend this work.

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EXPERIMENTAL RESEARCHES ON ALCOHOLIC POISONING.

During the last five years Drs. Audigé and Dujardin Beaumetz, of Paris, have been experimenting on the toxic properties of the various alcohols; the subjects of their experimentation being dogs and swine. Their later experiments on chronic poisoning have been on hogs.

The results of their studies on acute poisoning are embodied in a stout octavo volume of about four hundred pages.

The least toxic of the alcohols is ethyl alcohol, from vinous fermentation; the most toxic is amyl alcohol (potato spirit, fusel oil).

As for the toxic phenomena determined by the alcohols, they may be divided into three periods, a period of ebriety or of excitation, a period of resolution, and a period of collapse. With the alcohols obtained by fermentation these three periods succeed each other in regular order, but in proportion as you depart from the ethyl series, their character is more accentuated, their evolution more rapid, and certain convulsive phenomena appear.

In the case of all animals which had died from acute poisoning by alcohol, the necropsy discloses lesions of the respiratory and circulatory apparatus, of the nervous system and of the kidneys. As for the digestive apparatus, the lesions on the part of the gastric mucous membrane are inconspicuous when the alcohol is introduced by the hypodermic method; but when the poison is introduced by mouth, the mucous membrane of the stomach is invariably found softened, and the more concentrated the alcohol the greater the softening. The intestine undergoes the same alteration, and punctiform hemorrhages are seen, even when the alcohol is introduced subcutaneously.

The liver is more profoundly altered than any other gland. It is congested, softened and friable. The lungs are congested, and contain apoplectic foci. The kidneys are injected and present hemorrhagic extravasations, especially when fusel oil (potato spirit) is used.

Acute alcoholic poisoning in the human sub-

ject is attended with similar symptoms, and presents similar *post mortem* lesions.

It was in 1879, that Dujardin Beaumetz, and Audigé commenced in the abattoirs of Grenelle their researches on slow intoxication by the alcohols. They used hogs as the subjects of these experiments, giving these animals daily quantities of the commercial alcohols, which vary from one gramme to three grammes by kilogramme of weight. When the quantity is exceeded of five grammes to the kilogramme, the animal emaciates rapidly, refuses to eat, and soon dies.

Among the post mortem changes the lesions of chronic gastritis have been noted, also fatty changes in the kidneys. In the case of some of the animals, the necropsy revealed atheromatous degenerations of the large arteries, and in particular of the aorta.

In no instance has cirrhosis of the liver yet been observed. Three animals, after more than two years of dosing, have succumbed to the effects of the poison. Others have been killed from time to time, and the pathological lesions carefully noted.

The alcohols, administered in a gradual and continuous manner, determined various troubles. On the part of the digestive organs, vomiting of bile and glairy mucosities, abundant diarrhœas, which are often sanguinolent. The breathing is often oppressed, there are muscular tremblings, and often paresis of the posterior extremities.

The most marked manifestation of chronic intoxication in these animals, was a profound prolonged somnolence, without any period of excitation. When, however, absinthe was used, the animal became very irritable, and the period of excitation persisted for some time.

In some of the animals poisoned by the alcohols, contractures and cutaneous anæsthesia were observed.

In fine, the more impure the alcohol which was used in these experiments, the more marked the symptoms and the pathological lesions above described. Alcohol which was the genuine product of vinous fermentation, and thoroughly rectified spirits generally, were administered with comparative impunity.

A NEW CASE OF HERMAPHRODITISM.

(H. SPURIUS MASCULINUS.)

This case is reported by Prof. Marchand in Virchow's Archiv. Bd. xcii. Hft. 2, S. 286, and occurred in the person of one, M. R., æt. 29½ years, the recorded observations being made during the life of the individual.

This person was under medium height, grew up as a woman, although from early life she considered herself a male individual, possessed manly inclinations, and used them accordingly. She had had since puberty intercourse with women, and on numerous occasions spontaneous ejaculations of a white fluid, and at no time had she menstruated. The general habit of the body was a strange mixture of the female and male type, although the former predominated. The structure of the face, the neck, the voice, the form of the muscles, and the large hands and feet, appeared manlike; on the other hand the long hair, the beardless face, the decided mammary development and the structure of the body, especially of the abdominal and pelvic regions, seemed woman-like. The external genitals resembled more nearly those of a woman than those of a man. Small, non-perforated penis, or large clitoris with double frenulum, imperfectly separated, or properly joined, but small labia pudendi; a very small vestibulum in the separate openings for the urethra and vagina; no trace of testicles in the folds of skin in either side or in the inguinal canal. The internal genitals, as far as could be ascertained at this examination, consisted of a vaginal canal 9 c. m. long, a tolerably well developed uterus, but on the other hand no trace of prostate gland or seminal vesicles, and two bodies which could be considered with equal right as testicles or ovaries.

The question whether this is a case of spurious hermaphroditism, either of the male or female gender, or a case of true hermaphroditism, is not answered, especially as only an autopsy could decide in what way the vasa-deferentia joined the uterus, if rudiments of the seminal vesicles existed, and most of all how the sexual glands behaved. After a full consideration of the matter

and comparison of this with other cases and specimens, he concludes that M. R. is as a matter of fact of the male persuasion, and presents a high grade of hermaphroditism of the external and internal genitals, together with a general female habit of the body, but that the possibility of this being a case of hermaphroditismus verus lateralis is not to be entirely excluded.

REGULATION OF MEDICAL PRACTICE IN GERMANY.

The German tribunals are not always consistent in their decisions in cases regarding the practice of medicine by unauthorized persons. The German Code does not regard it as an offence, and two cases which recently occurred show the lack of unanimity among jurists in such cases.

An accident happened in an obstetric case to an irregular practitioner of medicine in Leipsic. A first decision against the accused was broken in the court to which an appeal was made, and it is impossible to tell what will be the decision of the judges who have it at present under consideration.

In a second case, an uneducated midwife (sage-femme sans diplôme) was accused of causing the death of one of her patients by negligence. The accusation was founded on the fact that after the birth of the child the midwife drew so hard on the cord that she broke it. In consequence of this manœuvre, the placenta could not be removed, and the woman died a few days later of uterine complications. The first court before whom the case was brought decided that death was certainly due to the ignorance of the midwife, but that the law punishes only negligence; and there can hardly be said to be negligence where a woman who has never learned the obstetric art officiously renders her services, even when, through her ignorance, the patient suffers.

[We see no reason why the same defence could not be brought forward in a similar case occurring in the practice of one of the ignorant old women who act as midwives in the large cities of the United States.]

But the tribunal before whom this case came on appeal, decided that the midwife could not be held guilty if she had assisted the woman out of motives of pure humanity, but from the moment she presents herself before the public as a midwife, and receives compensation for her services, then she is held to declare implicitly that she possesses the capacity and instruction necessary to practice that profession. Consequently, every infraction of the general laws of obstetrics, imputable to the ignorance of such persons, is a negligence in law, and should be punished as such.

ERGOT TO PREVENT THE TOXIC EFFECTS OF THE SALICYLATES.

Schilling, in a recent memoir (Ærtzl. Intelligenzblatt, 1883), states that he has observed, after the administration of rather strong doses of the salicylates, (ʒ iss to ʒ iiss. per diem, ℥ ij to ℥ iij. in all), lasting troubles of audition, the tympanum being thickened. Another patient who took on two consecutive days the massive dose of thirty grains of sulphate of quinine, became subject to ringing in the ears with marked deafness. It is not at all rare to observe these troubles of audition after the administration of large doses of the salicylates or of sulphate of quinine; they are attributed to hyperemia, brought about by the vaso-paralytic action of the remedies. To obviate this vascular paralysis, Mr. Schilling has the idea of administering ergot in connection with these drugs:

℞. Ergotine, gr. xv. vel.
Ext. ergot. fl. in proportionate dose.
Sodæ salicylat., ʒ iiss.
Aquæ, ℥ vj.
M. S. Tablespoonful every hour.

Out of 87 patients who took the salicylate in this form, three-fourths did not suffer at all from ringing in the ears. In the same way nine others took sulphate of quinine, one gram to one and a half of ergot, without any troubles of audition. It would seem also that this association of quinine and ergot prevents the development of the amblyopia, which sometimes supervenes after the administration of large doses of quinine.

Notes and Comments.

A New Test for Living Germs in Water.

The *Drug. Circular and Chem. Gaz.*, April, 1883, has the following:

Many analysts, says the *Brewer's Guardian*, are in the habit of testing the organic purity of a water by dissolving a little sugar in it; if the germs of any living organisms are present, the water will, after being kept in a warm place for about twenty-four hours, become cloudy, and sometimes quite milky or opaque, owing to the rapid development of fungoid organisms, resulting from the growth of the germs in a suitable nutritive medium. The test is a valuable one, but requires to be used with caution. It is well to remark, however, that some chemists believe that the growth of the fungoid organisms is dependent upon the presence of phosphates, rather than upon any organic impurities, and that it is possible the germs may be derived from the air, and not from the water itself. Those who have experimented on the subject cannot have failed to observe how very varied is the behavior of different waters when treated with sugar. Recently Dr. Smith, of Manchester, has pointed out that gelatine is most valuable in detecting organic vitality in waters. About $2\frac{1}{2}$ per cent. of gelatine well heated in a little water is mixed with the water to be tested, and the mixture forms a transparent mass, which is not movable like the water itself. When soluble or unobserved matter develops from the organic matter of the waters, and makes itself visible in a solid and insoluble form, it does not fall to the bottom, but each active point shows around it the sphere of its activity, and that sphere is observed and remains long. The gelatine preserves the whole action, so far as the more striking results are concerned, and keeps a record, for a time, both of the quality and intensity of life in the liquid. Dr. Smith speaks of the more striking effects, which are clear and abundant, every little centre of life making itself apparent to the eye, and sometimes expanding its influence to reach both sides of the tube. It seems to him now essential that all chemical examination of water should be supplemented by an inquiry into the comparative activity of the living organisms.

The Nature of Fever Poisons.

Before the Sheffield Medico-Chirurgical Society (*Lancet*, March 3, 1883), Dr. Martin read a paper on Questions as to the Nature of Fever Poisons. Having reviewed some of the older theories as to the nature of the infective matter, he went into the germ theory, and broached the view that the phenomena of fever, be the special form what it may, are not produced by the mere presence of germs as germs, but that they are due to the presence of some toxic product, dependent upon the existence, growth, and waste of different species of germs in the systems of the patients affected. This product may be an excretion, or possibly a secretion, excreted or secreted by the germ. What its chemical nature may be Dr. Martin does not profess to know; possibly it may be alkaloidal in its constitution. He drew attentention to Pasteur's experiments with the chicken cholera bacterium, when, with the fluid freed by careful filtration from the presence of germs, he obtained by inoculation toxic and narcotic effects similar to those observed in the disease itself. Dr. Martin disagreed with M. Pasteur's conclusion, that because the effects were only slight and transient, therefore it could not be said that the disease was due to a poisonous product apart from the germs themselves. The toxic product, whatever it is, could not propagate itself, and was soon cast out; but when the germ is living and multiplying there is a constantly increasing supply. Dr. Martin pointed out a fact that had come to his knowledge after his paper had been written, that Pettinkofer foreshadowed this view in connection with the subject of cholera.

Congenital Defect of Rectum.

Before the Academy of Medicine in Ireland (*Med. Press*, March 21, 1883), Dr. E. H. Bennett read a paper on this subject: The variety of deformity exhibited was that in which the anus and other pelvic organs, except the rectum, were normal, and there existed a cord of variable length connecting the anal *cul de sac* with the extremity of the intestine. With the specimen recently acquired, Dr. Bennett showed three examples of the same deformity, contained in the Museum of the Royal College of Surgeons, and contrasted these with an example of complete defect of the anus and urino-genitary outlet contained in the Museum of the School of Physic, Trinity College. Having directed attention to the views of Giraldes and of Curling, who have attributed this deformity to obliteration of the rectum by a pathological process, Dr. Bennett showed, from the evidence presented by the specimens, that this view was erroneous, and that the lesion is due to the arrest of development of the bowel, the hypoplastic pouch failing to reach the anal infliction from the surface of the embryo. He indicated the probable analogy

between the muscular cord connecting these parts and such bodies as the gubernaculum testes. He further demonstrated that attention to the position and relations of the cord might enable the surgeon when operating for relief of the deformity to avail himself of it as a guide to the intestine.

Hyperidrosis of the Axilla in Nude Subjets.

In the *Ann. de Dermat. et de Syph.*, December 25, 1882, Dr. Aubert reaches the following conclusions from extensive observation:

1. Axillary hyperidrosis is almost always present in nude subjects.

2. This is so great in many instances that streams of perspiration may be observed running down the body and the inner side of the arm.

3. The chief cause of this phenomenon seems to lie in the anatomical disposition of this region permitting of a local elevation of temperature, while that of the general surface is lowered by the surrounding atmosphere.

4. This local elevation in a number of instances amounted to nearly 1° F.

5. Various facts lead to the supposition that this elevation of temperature finds in the glands of Robin an organ favorably disposed, by its innervation and structure, to the reception of thermic influences.

6. The mental effect produced by nudity and examination may aid in causing an increased secretion, but it plays a very subordinate rôle in the production of this phenomenon.

Phlegmonous Inflammation of Stomach after Gastrostomy.

At a recent meeting of the Pathological Society of London (*Brit. Med. Jour.*, March 24, 1883), Mr. Herbert Page exhibited an important specimen of phlegmonous inflammation of the stomach after gastrostomy. The patient fared well after the operation, and the stomach was opened on the fifth day; he was subsequently fed through the gastric fistula, and his progress was most satisfactory for three weeks; then he, somewhat suddenly, began to complain of *malaise*, grew feverish, was seized with severe intractable vomiting, and died in about thirty hours. At the necropsy, some puriform fluid was found in the peritoneal cavity; but the most remarkable pathological change was in the stomach; the walls of this organ were enormously thickened, and yielded, when cut, a thick creamy fluid. Mr. Silcock, who made the necropsy, attributed death to this phlegmonous (parenchymatous) inflammation of the stomach, and stated that few other cases of a parenchymatous inflammation occurring after injury to the stomach were on record; he seemed inclined to account for the inflammation on the theory of digestion of the gastric walls, beginning at or near the wound; but we confess that another fact noted by him—that there were immense numbers of micrococci in the fluid which flowed from the cut surfaces of the stomach—seems to us of considerable importance, suggesting that the inflammation was of an infective nature.

Chamomile in Infantile Diarrhœa.

The *Obstetrical Gazette*, June, 1883, says:

Dr. Christopher Elliott, Physician to the British Hospital for Sick Children (*Practitioner*, December, 1882), endorses Ringer's claim for the great value of infusion of chamomile in infantile diarrhœa connected with dentition, and in which the stools are many in number, green in color, or are slimy and streaked with blood, and accompanied by pain and cramp. He gives ʒss.—ʒj. of the infusion to a child under one year, and double the quantity to a child over that age, giving it three times a day or oftener, according to the severity of the attack. He explains the rationale of this treatment by the power which chamomile flowers possess of subduing reflex excitability, a power residing in the volatile oil contained in them. Grisan was unable to tetanize, by means of strychnia, a decapitated frog which had been fortified with a dose of chamomile oil, and *vice versa*, when reflex excitability had been artificially produced by means of strychnia, it could be calmed again by chamomile oil.—*The Medical Age.*

Copperhead Venom.

Dr. I. Ott (*Virginia Medical Monthly*, February, 1883), comes to the following conclusions:

1. The venom of the copperhead is weaker in toxic activity than that of the rattlesnake.

2. The heart, with both kinds of venom, becomes greatly prostrated, and in rapid deaths is their main cause.

3. The venom of either snake does not affect the sensory nerves.

4. The sensory centres are affected by both venoms.

5. The muscular excitability continues to be little affected at the time of death by the poison of the copperhead.

6. The two venoms greatly resemble each other in physiological activity.

7. The cardiac force, rhythm, and frequency are lowered by both venoms.

8. The arterial tension is greatly lowered by both venoms.

9. The blood, after copperhead-poisoning, shows no microscopic changes of its globules, and no difference in its spectrum.

Extensive Scarring of an Infant's Face from Injuries at Birth.

In the *Brit. Med. Jour.*, March 3, 1883, Dr. Snell exhibited photographs, and gave particulars of this case. The child had been brought to him at the General Infirmary last summer, when it was about three or four months old. There was ectropion of both upper eyelids, especially the left, which exposed a good deal of conjunctiva. In addition to this, the forehead was seamed almost all over with cicatrix, which also ran over the nose, the point of the latter being puck ered. On the left cheek was a large semicircular scar running from the nose to the mouth; but the right cheek was the most affected, and the right apinna seemed in great measure destroyed and tied down by the surrounding cicatrix. The surface of the head was also scarred. The only explanation was that given to Mr. Snell by the medical man who, called in at the confinement, had arrived late, and found a midwife industriously rubbing with a towel the face and head of the baby.

The Proximate Cause of Fever.

From the *Medical Times*, April 21, 1883, we note that Prof. N. Zuntz, from a series of experiments undertaken to discover the source of the increased oxidation and tissue-combustion which occur in the febrile process, concludes that it is to be regarded as residing in the nervous system, rather than due to a ferment in the blood. In curarized dogs, it was found that the injection of a pyrogenic agent which caused fever-phenomena in other animals was not in this case followed by increased absorption of oxygen, and the amount of carbonic acid excreted remained constant. The author, therefore, believes that the innervation of the muscles is responsible for the febrile increase of the processes of oxidation in the animal.—*Centralblatt für d. Med. Wissenschaft.*

Dysidrosis.

Before the Academy of Medicine in Ireland (*Med. Press*, May 2, 1883), Mr. Corley read a paper on the disease to which Tilbury Fox applied this name, and which Mr. Jonathan Hutchinson termed cheiro-pompholyx. He detailed the history of two cases, both following injury of the median nerve, and in one of which, after the eruption had disappeared from the hand of the injured side, a similar eruption broke out on the opposite hand. This, he considered, indicated that the irritation produced in the member first affected was propagated to the spinal cord, and produced there a nervous disturbance which passed across and down the nerves of the opposite limb. From the consideration of these cases, as well as those detailed by Hutchinson and Fox, Mr. Corley was of opinion that the disease was genuine herpes zoster of the hand, due to either centric nervous disturbance or irritation of nerve trunks, and he therefore rejected the name and pathology suggested by Tilbury Fox.

A Tooth at Birth.

Dr. Fordyce Grinnell, of Pine Ridge Agency, Dakota, reports the following case in the *Med. News*, March 31, 1883:

I drew a tooth for an infant seventeen days old. The child was a female, one-quarter Sioux. When it came into the world it had this tooth, a lower central incisor, developed as now presented. The crown and body of the tooth seemed fully developed, and as large as the usual milk tooth. The attachment to the gum, instead of a root, appeared to be a mere fleshy connection, and hence not very solidly implanted. Moreover, it gave the child great uneasiness in nursing. The tongue in moving over the sharp surface presented by the tooth, in every attempt at drawing milk from the breast, became abraded, and finally ulcerated. As soon as the tooth was extracted, the child took the breast with avidity. The pain caused by nursing had undoubtedly interfered with the child getting a sufficient amount of nourishment.

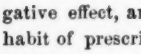
Euonymin in Therapeutics.

At a recent meeting of the Soc. de Therapeutique, M. C. Paul read a communication on this subject. He found that euonymin had a somewhat analogous action to podyphillin, being an excitant of intestinal contractility and of biliary secretion. It is of incontestable efficacy in intestinal atony. It acts best in the dose of four or six grains, but if used continually for a period its laxative effects diminish, particularly if the patient is confined to the bed. M. Blondeau remarked that he had given it to patients in two-grain doses for a period without noticing any diminution in its effects.

M. Dujardin Beaumetz found euonymin an excellent cholagogue with comparatively little pur-

gative effect, and for this reason he was in the habit of prescribing it in combination with laxatives.

Suture-Clamp Coaptation.

Dr. J. H. Cipperly reports a new method for closing wounds, *N. Y. Med. Record*, 5, 26, 1883. The clamp is to be made of hard silver wire, bent at acute angles at both ends, and the extremities of the arms sharpened to a point thus:  penetrate one lip of the wound at a time, and introduce a clamp at regular distances until the coaptation is complete. By the use of this instrument we do away with needle, wire, needle-forceps, scissors, and the trouble accompanying them.

The arms of the clamp sustain both walls, so that the deeper parts of the wound conjoin: hence less opportunity for the pocketing of blood and pus, *ergo*, more rapid healing. Made of various sizes, their application is general, and they may be used again.

Is the Blood a Living Tissue?

Dr. Frances Emily White, after discussing this question somewhat at length (*Med. Record*, May 26, 1883), comes to the following conclusion: From every point of view,—whether of origin and development, of structure and function, or of analogy with other tissues—the blood must be regarded as a *true tissue;* originating, in common with the other tissues, from the cells of the blastoderm; consisting, like other tissues, of structural elements and an unstructured matrix; maintaining its chemical and structural integrity by the processes of nutrition common to all tissues; and, like other tissues, subserving the interests of the organism at large through the performance of its own particular function.

Psychical Symptoms from Cranial Depression.

The *Journal of Nervous and Mental Diseases* for April, 1883, says that Dr. Guermonprez (*Archives Générales de Medecine*, August, 1882) comes to the following conclusions respecting the influence of depression of the cranium in childhood:

1. Depression of the cranium, whether complicated or not, may in a general way be the cause of various psychical disturbances.

2. Such disturbances are more marked when the depression is on the left frontal region.

3. Such depressions may interfere with the normal psychical development and with the cerebral growth.

The second conclusion is based on *à priori* ideas rather than on experience.

Naphthol for Local Sweating.

From the *New Orleans Medical and Surgical Journal*, June, 1883, we note that the *Repertoire de Pharmacie* gives the following formula for hyperidrosis, or excessive sweating of the hands, feet and axilla:

Naphthol	5 parts.
Glycerine	10 "
Alcohol	100 "

To be used as a lotion twice a day, afterwards dusting the parts with pulverized starch or with a powder made as follows:

Pulverized naphthol	2 parts.
Starch	100 "

For perspiration of the feet, a pledget of cotton impregnated with the above powder is placed between the toes.—*Journal de Medecine et de Chirurgie Pratique.*

Gastrotomy for Intestinal Obstruction.

Dr. Alder Smith reports a successful case in the *Brit. Med. Jour.*, May 26, 1883, the principal feature of interest in which is the apparently favorable influence on the operation of a narcotic preparatory treatment. For four days before the operation, the bowels were kept "in splints" with opium. When the bowels were exposed, it was found that the lower portion of the ileum was tightly nipped by a constricting band. This was relieved, and the subsequent treatment was principally with opiates. The wound healed by first intention, and the woman made a rapid recovery. The carbolic spray was not used, though the hands, instruments, and patient's abdomen were washed in carbolic solution, 1–40.

Malarial Amblyopia.

Dr. Jno. D. S. Davis calls attention to a form of intermittent amblyopia, varying in degree from slight impairment of vision to almost complete blindness, which he believes is due to malaria. In the *Weekly Med. Review*, June 26, 1883, he publishes three illustrative cases, and recommends quinine, nux vomica and iron for the treatment.

Disinfection by Corrosive Sublimate.

The *Med. Times and Gaz.* April 21, 1883, says that Dr. Tarnier, Surgeon to the Paris Maternité, has the greatest confidence in Van Swieten's liquor, employed as an obstetric antiseptic. The midwives and pupils all wash their hands in this liquid, and the whole of the genital region of the

patient is washed and injected with a solution of corrosive sublimate at a strength of two-thousandths. Prior to delivery the injection is renewed every three hours, and no accidents from its employment have ever occurred. Dr. Tarnier proposes the disinfection of napkins and mattresses by the same means.

Treatment of Retained Placenta after Abortion.

Contrary to the views held by Dr. Paul F. Mundé, who strongly advocates its forcible removal, Dr. Hiram Von Sweringen, (*Obstetric Gazette*, June, 1883,) with equal emphasis cautions us to let the placenta alone after abortion. In addition to his own experience he cites that of many others, who all unite in the recommendation that it is best to leave the removal to nature. Rest and ergot are his therapeutic resources. If there is hemorrhage, hot water injections; if much pain, opium; if it does not come away in two or three days, carbolized injections; but *never* force.

Hepatic Abscess.

In the *New Orleans Med. and Surg. Jour.*, June, 1883, Dr. A. McShane relates the case of a young man who was taken ill with malaria. This was followed by pain in the right side and persistent cough. The liver became much enlarged. Finally, symptoms of empyema supervened; aspiration was resorted to and sanguinolent pus withdrawn. The needle was introduced between the fifth and sixth ribs. The patient continued to sink, and finally died. The autopsy revealed the upper edge of the liver, as high as the third intercostal space, and containing two large abscesses.

Strangulation of Bowels—Laparotomy.

We have recorded a successful case; (see p. 52), we have now to record a fatal one, (*Boston M. and S. Jour.*, June 7, 1883), wherein the unfortunate issue seemed due to delay in operating. The strangulation was allowed to continue for six days, by which time the bowels had become so congested that sloughing and extravasation of fæces into the abdominal cavity occurred. These cases would seem to indicate that when we have evidences of invincible obstruction, with stercoraceous vomiting, we should prepare the patient by a course of narcotics, and operate without delay.

Treatment of Goitre.

The operation recommended by Mr. Sidney Jones (*Med. Press*, May 30, 1883), consists in excision of the isthmus of the thyroid instead of extirpation of one or both lobes of the organ; and in a case in which he recently adopted it, the proceeding was the most successful possible. A curious consequence of the operation, and on which Mr. Jones laid especial stress, is the invariable atrophy of the gland substances which ensues when the isthmus is taken away.

CORRESPONDENCE.

Hypophosphite of Lime in Cancer.

EDS. MED. AND SURG. REPORTER:—

Some time ago I received a copy of a lecture by Dr. Hunter McGuire, of Richmond, Va., on the subject of "Cancer of the Breast," in which he recommended the use of hypophosphites of lime and soda. This formula is:

℞. Hypophosphite of lime and soda, ℥ ss.
Diluted phosphoric acid, ℥ ss.
Distilled water, ℥ viij.

M. S.—Teaspoonful in water three times a day, and when indicated, he sometimes uses in addition arsenic and iron in the forms of chlorides of arsenic and iron.

At the time of reading the lecture I had under my care two cases of cancer, one of the breast and one of the ear, at the angle of the left jaw. About a year before I was consulted in the case of cancer of the breast; the breast had been entirely excised; but the wound made no effort to heal, and grew to be an ulcer two inches wide by two inches long. The cancer of the ear also presented an ulcer irregular in shape, covering the space of an inch or more in extent. I gave at once internally:

℞. Hypophosphite of lime, ℥ iss.
Bromide of potassium, ℥ ij.
Fowler's solution, ℥ iss.
Aqua destil., ℥ viij.

M. S.—Dose, a tablespoonful every three hours.

And as an external application, the following:

℞. Tar.
Alcohol, āā ℥ j.

M. S.—Apply freely to the ulcers three times a day.

Both patients have been using the above prescriptions for six months, and the progress of the cancers is not only arrested, but the ulcers almost healed. There is no doubt that the progress of cancer can be delayed by the use of the hypophosphites in combination with arsenic.

J. B. JOHNSON, M. D.

Washington City, D. C.

A Case of Empyema.

EDS. MED. AND SURG. REPORTER:—

On January 6, 1882, was called to see Mr. M., aged 25, and found him suffering from a severe attack of pleuro-pneumonia of right side. Pulse 110; temperature 103½°. Gave him treatment. On the 14th the pulse and temperature were normal, the pain had left the side, the rusty-colored sputa had disappeared, and the patient seemed to be doing well. Extensive dullness, however, con-

tinued, extending from base of lung as far upward as third intercostal space. On the 17th pulse ran up to 110, temperature 102, night-sweats occurred, cough very distressing, some bulging on front part of lung, about seventh intercostal space. Patient continued to grow worse. February 6, used aspirator, and drew off 39 ounces of pus. This afforded some relief, but pus reaccumulated and on the 25th began discharging through opening made by aspirating needle. March 5th, the patient being placed under the influence of ether, I made an incision into the pleural cavity at the fifth intercostal space, when a large amount of pus made its escape. The cavity was then washed out with distilled water, at a temperature of 103, and a silver canula, which could pass easily between the two ribs, but which was wide enough in the other direction to allow two of Nelaton's catheters of medium size to pass through, was placed in the wound, and secured in position by means of adhesive plaster. The cavity was washed out twice daily with warm distilled water, to which salt one grain to the ounce or tr. iodine co. one part to thirty was added, and the canula, was every day removed, cleansed, and reintroduced. From the date of the operation, the patient's improvement was continuous, and on May 27th, the cavity having entirely closed, the canula was withdrawn, and the patient discharged cured.

FRANK H. MURDOCK, M. D.

Bradford, Pa., June 27, 1883.

Chloroform in Menorrhagia.

EDS. MED. AND SURG. REPORTER:—

In the issue of your journal for June 23 appears an abstract of a paper published in the *British Med. Jour.* for May 26, 1883, in which Mr. J. Brown claims that cannabis indica is "a valuable remedy in menorrhagia." He says: "Textbooks give the dose as ten minims and upwards (of the tincture), but five minims is the largest dose that should be given at first. . . . . Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason it ought to take the first place as a remedy in menorrhagia, then bromide of potassium and other drugs."

The prescription, however, which is stated to accomplish this happy result calls for fifteen minims of the tincture of cannabis indica every three hours along with half a drachm of spirits of chloroform, and the question very naturally arises as to what effect the chloroform may have in such cases. Fifteen minims of the tincture contain nearly half a grain of the drug, and when united with the liberal dose of chloroform, very decided effects will certainly follow administration, but for this we are somewhat prepared by the suggestion of the author that "a few doses are sufficient." Assuming that an error has been made in transcribing, and that the mixture contains six ounces instead of two, thus reducing the dose of cannabis indica to five minims, we still have the same proportion of chloroform; and in estimating the utility of cannabis indica, ten minims of chloroform every three hours is a factor which should not be overlooked.

JOHN AULDE, M. D.

Philadelphia, June 26, 1883.

This article has been transcribed *exactly* as it appeared in the *British Medical Journal.*

EDS. M. AND S. REPORTER.

A Monstrosity.

EDS. MED. AND SURG. REPORTER:—

The malformed Batts child, reported on page 645 of the REPORTER of June 9, 1883, died at the age of twenty-four days. The *post mortem* revealed the following abnormal condition: The alimentary canal entered and terminated in the fundus of the bladder. There was no appearance of any part of a rectum. The peritoneal sac terminated firm, smooth and intact with the rim of the pelvis. No other malformations were found. Inflammation of the posterior wall of the bladder, terminating in gangrene and perforation, with escape of the contents of the bowels into the peritoneal sac, was the immediate cause of death.

P. F. TURNER, M. D.

Lancaster, O., June 18, 1883.

Alcoholic Treatment of Zymotic Diseases.

EDS. MED. AND SURG. REPORTER:—

Your editorial on "Micrococci," in No. 21, p. 587, May 26, 1883, is most invaluable (and thank you for it). I have used alcohol in such cases with the best results. I prefer ordering alcohol with some flavoring syrup in a prescription in preference to whisky. I can regulate the dose and know what I am giving.

JOHN UNDERHILL, B. A., M. D.

Hamilton, Ont., June 22, 1883.

NEWS AND MISCELLANY.

Maine Medical Association.

At the thirty-first annual meeting, held in Portland, June 12, 13, and 14, the following papers were read:

"A biographical sketch of Dr. Alexander Ramsey," by Dr. George P. Bradley, U. S. N.; "Absence of uterus in a married woman, and a cure of cyst in the vesico-vaginal wall," by Dr. S. P. Warren, of Portland; "Synovitis," by Dr. J. G. Pierce, of Freeport; "Acute inflammation of the middle ear," by Dr. A. K. P. Meserve, of Portland; "Extra-uterine fœtation," by Dr. H. N. Small, of Portland; "Fractures of the elbow-joint," by Dr. S. H. Weeks, of Portland; "Diseases of the mastoid," by Dr. E. E. Holt, of Portland; "The induction of premature labor," by Dr. A. H. Burbank, of Yarmouth; "Bright's disease," by Dr. J. T. Dana, of Portland.

Dr. J. A. Spaulding, of Portland, read a paper giving an account of the testimony in a trial for alleged malpractice, where he was called as an expert.

"Rational medicine and quackery," by Dr. M. C. Wedgewood, of Lewiston; "Chronic abscess of the tibia," by Dr. B. F. Sturgis, of Auburn; "A case in which the bladder was divided by a septum," by Dr. F. H. Gerrish, of Portland.

Dr. Gordon read a paper on the treatment of some accidents occurring during parturition, de-

voting especial attention to lacerations of the cervix, ruptures of the perineum, and cystocele.

Dr. Weeks reported a case of immense sarcoma of the head, which illustrated the importance of early removal of morbid growths.

OFFICERS FOR ENSUING YEAR.

President—Dr. O. A. Horr, of Lewiston.
Vice-Presidents—Drs. L. W. Pendleton, of Portland, and D. E. Marston, of Monmouth.
Recording Secretary—Dr. Charles D. Smith, of Portland.
Corresponding Secretary—Dr. J. O. Webster, of Augusta.
Treasurer—Dr. A. S. Thayer, of Portland.

A New Uterine Repositor.

In the *New York Medical Journal*, June 30, 1883, Dr. Alfred L. Carroll, of New Brighton, N. Y., says:

The accompanying woodcut shows a uterine repositor, made by Messrs. Tiemann & Co., which

possesses the advantage of continuous and perfectly controllable application of power. Its construction is so simple that a glance at the engraving will render unnecessary any detailed description.

Oregon State Medical Society.

The tenth annual meeting was held at Portland, June 13, 14, and 15, and the following papers were read:

"Parametric abscess," by Dr. G. M. Wells; "Hip-joint disease," Dr. B. A. Owens; "Diagnostic importance of ocular affections in constitutional diseases," by Dr. F. B. Eaton; "Excision in hip-joint disease," by Dr. Saylor; "Antiseptic and aseptic surgery," by Dr. Holt C. Wilson; "The present condition of insanity throughout the world," by Dr. Josephi; "Dentition and affections resulting therefrom," by Dr. B. A. Owens; "Gunshot wound of stomach with recovery," by Dr. J. F. McCormac; "Sponge grafting in chronic ulcers," Dr. Saylor; Presidential address," by Dr. C. C. Strong.

OFFICERS FOR ENSUING YEAR.

President—Dr. W. A. Saylor.
Vice-President—Dr. J. W. Norris.
Secretary—E. P. Fraser.
Member of the Executive Board—Dr. C. M. Wells.

The Philadelphia Hospital for Skin Diseases.

The Board of Managers at the Hospital for Skin Diseases, of Philadelphia, announce that they have recently added to their facilities a complete system of baths for the general and specific treatment of this class of affections. The subject of balneology, as connected with skin diseases, is receiving much attention from specialists.

Free clinics are given at the hospital daily, at 11.30 a. m., by the physician in charge, Dr. John V. Shoemaker. The course is made more comprehensive by didactic lectures which are delivered at the hospital on Mondays and Fridays, at 11 o'clock a. m.

Physicians and advanced medical students are always welcome either as visitors or for the purpuse of attending the free clinics. The superintendent, Mr. F. C. Waterman, will be in his office at the hospital every day from 11.30 a. m. to 2 p. m., to receive visitors or to transact business.

Foul Water and Typhoid Fever.

A regatta at Evesham, England, was followed by sixty-eight cases of typhoid fever among persons who attended it. An investigation developed the fact that nearly every one had drunk lemonade at a refreshment stand, the proprietor of which had mixed the beverage with water from a disused well that was closed because it was known to be foul. Whether or not this well had been contaminated by a specific typhoid infection does not seem to have been established.

The Electric Light in Vienna.

A Vienna paper says that the electric light has been introduced in the wards and operating room of the General Infirmary in that city. There is a portable as well as a fixed lamp in each ward. The accumulator system obviates the necessity of the dynamo working at night, but it states that it is too expensive for general adoption.

The First Cremation in Rome.

The remains of Senator Cipriani have been cremated in Rome. This is the first case of cremation that has taken place there.

Porro's Operation.

Dr. W. H. Parrish performed this operation at the Philadelphia Hospital on June 28. The woman died from uræmia on the third day.

Items.

—Dr. J. Solis Cohen says so many cases of tuberculosis of the larynx indicate an equal number of funerals.

—Charles Reade, the novelist, is credited with having named a dog Tonic, because it was a mixture of bark, steal, and whine.

—A graduate of a certain medical college in Missouri, returned "earysipelis" as the cause of death of one of his patients.

—Professor Baumler, of the University of Frieburg, applies an ice bag to the chest to relieve the pleuritic pains in pneumonia.

—Mr. Barney Mulcahey says he can see no earthly reason why women should not be allowed to become medical men.

—Dr. Bonarny, in a recent thesis, describes two epidemics of urethritis among soldiers in Africa caused by eating frogs which had fed upon cantharides.

—At the last quarterly meeting of the Illinois State Board of Health it was decided not to recognize diplomas of the United States Medical College in future.

—Schnaubert recommends highly an exclusive milk diet in cases of exophthalmic goitre. He reports three cases very favorably influenced by such diet.

—The Pass of San Gorgonia, the counties of San Diego, Los Angeles, and Santa Barbara, are the parts of Southern California most suitable for phthisis pulmonalis.

—From the histories of 3,500 women in Helsingfors, Finland, Dr. G. Heinricius states that the average age at which menstruation commences is 15 years 9 months and 25 days.

—For gall-stones, Dr. John Barclay, of Leicester, England, highly recommends two or three drops of chloroform three or or four times daily in any vehicle, persevered in for two periods of attack.

—The taste and smell of turpentine are best masked by sulphuric ether. A mixture of turpentine ℥ij.; ether ℥j.; syrup of orange, ℥j.; and water, ℥iv., can be taken in teaspoonful doses quite readily.

—Dr. Tyson, of Philadelphia, recommends the addition of molasses to mustard in making plasters. This furnishes a mild persistent counter-irritant which can be worn for hours.

—In his address before the Medical Society of Tennessee, Dr. Thomas Lipscomb, of Shelbyville, told the members that in 1831 he traveled 1300 miles on horseback in order to attend a course of lectures in the University of Pennsylvania.

—For herpes zoster painting the vesicles with strong carbolic acid and covering with a layer of thick cotton-wool, has been successfully applied by Dr. Lambuti. He reports a case of the kind in the Revista Clinica di Bologna.

—Prof. Von Hecker reports a case (*Wien. Med. Bl.*, 1882, No. 40), in whom the induction of premature labor had been performed eight times without injury to the mother; all but one of the children were born alive, but died afterwards from neglect on the part of the mother.

—A memorial tablet has been placed on the house in Reiter street (now Skoda street), Vienna, formerly inhabited by the celebrated physician, Dr. Skoda. The inscription—rendered into English—is: "Dwelling house of Professor Joseph Skoda; born in the year 1805, died in the year 1881."

—In his presidential address before the New York Academy of Medicine, Dr. Fordyce Barker gives the following statistics of medico-literary activity in the metropolis: "The number of medical works by New York authors in the fifty years from 1800 to 1850 was 109. In the ten years from 1850 to 1860 New York writers published 65 medical works. From 1860 to 1870 the number was 69, and from 1870 to 1880 the number 102, the whole number in the last thirty years being 236. To this it should be added that New York writers have also, in this period of thirty years, contributed, according to the most accurate estimates that I can obtain, at least 25,000 pages to the periodical medical literature of the country."

DR. ARTHUR F. TAYLOR.

Dr. Arthur F. Taylor, late Principal of the Cass School of Applied Science, at Cleveland, Ohio, died suddenly in New York, June 28. Dr. Taylor was thirty-one years old, and was a son of the late Dr. Samuel H. Taylor, for many years Principal of the Phillips Academy at Andover, Mass. He was born at Andover, and received his preliminary education at the academy. Afterward he was graduated from Dartmouth College in the class of 1874, and then studied two years in Germany at the University of Göttingen, where he received the degree of Ph. D. On returning from abroad he was appointed assistant instructor in the Department of Physics in the University of Pennsylvania. He remained there three years, and then went to the Cass School at Cleveland. The cause of his death was heart disease

MARRIAGES.

QUIG—FERGUSON.—In East Waterford, Pa.. June 21, by Rev. T. J. Ferguson, assisted by Rev. George McCormick, of Salinas City, Cal., Dr. R. M. Quig and Belle Ferguson.

ALLEN—HUDSON.—At Sunny Side, Cincinnati, June 27, 1883, by Rev. C. H. Daniels, Dr. George M. Allen and Helen G. Hudson, daughter of the late Ceylon Hudson, and granddaughter of the late Rev. Horace Bushnell.

PARKER—WRIGHT.—At Christ's Church, Poughkeepsie N. Y., on Thursday, June 28, 1883, by Rev. D. G. Wright, S. T. D., assisted by Rev. Henry L. Ziegenfuss, Dr. Edward H. Parker and Jeannie C. Wright, daughter of the officiating clergyman.

DEATHS.

EWEN.—Suddenly, at Alloway, N. J., Tuesday. June 19, 1883, John H. Ewen, M. D.

BUELL.—In Brooklyn, N. Y., on Saturday, June 30, Richard M. Buell, M. D., aged sixty-one years.

CARPENTER.—In Cincinnati, Ohio, on Thursday, June 28, at 12 m., Dr. Isaac B. Carpenter.

CERNEA.—In this city, on June 30, Arthur D. Cernea, M. D, in his seventy-ninth year.

LIVINGSTON.—In New York, on Saturday, June 30, of diphtheria, Dr. Beverly Livingston, only son of Francis A. and Sarah J. Livingston, in the thirty-first year of his age.

TROUBAT.—In this city, on the 6th of July, Raymond Troubat, M. D., aged seventy-seven years.